LECTURES ON CHANCRE.

LECTURES ON CHANCRE,

DELIVERED BY M. RICORD,

SURGEON TO THE HÔPITAL DU MIDI, PARIS.

Published by M. Fournier, with Notes and Cases;

AND TRANSLATED FROM THE FRENCH, BY

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WITH

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BY THE TRANSLATOR.

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PREFACE.

M. Ricord's well-merited reputation, and the important truths set forth in his Clinical Lectures, supported as they are by observations taken from cases treated both in private and public practice, and my own personal experience of his valuable teaching, must be my apology for offering this volume to the Profession.

C. F. Maunder.

29, New Broad Street,
January, 1859.

LETTER FROM M. RICORD.

Paris, 10 *Novembre*, 1858.

Mon cher Confrère,

Les relations que nous avons eues à Paris, lorsque vous suiviez mon enseignement clinique, à l'hôpital du Midi, m'ont mis à même de vous apprécier comme homme de science, et me donnent l'assurance que je ne pourrais trouver en Angleterre un plus fidèle interprète de ma pensée.

Je suis donc heureux de savoir que vous avez bien voulu vous charger de la traduction de mes leçons sur le Chancre, publiées par mon élève, Monsieur Fournier.

Veuillez, très cher Confrère, recevoir l'assurance de ma haute considération et de mon entier dévouement.

Ricord.

à M. C. F. Maunder, F.R.C.S.,

Démonstrateur d'Anatomie à l'hôpital de Guy.

CONTENTS.

PART I.

PART II.

PART III.

PART IV.

NOTES AND CASES.

PART V.

LECTURES ON CHANCRE.

PART I.

Gentlemen,—A poet has written :—

" L'homme absurde est celui qui ne change jamais ;"

that is to say, he who esteems his own opinions more highly than truth itself. I applaud this maxim ; therefore you will not be astonished, if, in the course of my Lectures, I modify somewhat the doctrines which I have hitherto professed.

Defined generally, syphilis is a contagious disease, engendered by a virus, and commencing by a peculiar affection, the *chancre.*

The chancre presents this special character : that it is always the consequence of an affection analogous to itself, and that it necessarily becomes the source of a similar affection. In other words, it is at the same time the effect and cause of the virulent specificity. The chancre springs from a chancre, and can alone reproduce it.

I need not remind you of the doctrines of the confusionists of all ages, who give to this disease many sources of origin : gonorrhœa, vegetations, bubo, &c. Time and observation have dissipated these errors, and thrown a light upon the true source of syphilis.

Syphilis springs from the chancre, and recognises no other origin: this, gentlemen, is a fact abundantly proved daily, and one which the vain efforts of some few discordants fail to cast a doubt upon; it is a fact which the experience of twenty-five years upon a vast field allows me to proclaim without hesitation, and for which I do not fear the contradiction of generations to come.

As I have stated elsewhere, the chancre is to syphilis that which the bite of the mad dog is to hydrophobia, and unless hereditary, there can be no constitutional syphilis without this primitive affection.

The chancre is, then, the necessary exordium of acquired syphilis.*

But must the chancre give rise to syphilis? This affection, does it always present the same form? Are its consequences invariably alike? These questions, gentlemen, will afford us matter for consideration to-day; they are the chief points upon which I wish to arrest your attention in the course of these Lectures.

Let us now consider what clinical observation teaches. The pathological manifestations following a chancre are far from being identical in all cases. In one instance the chancre is followed, after an interval of a few weeks or months, or even later, by constitutional symptoms which invade, in turn, the different organs, the *skin*, the *mucous membranes*, the *viscera*, the *bones*. In another case, on the contrary, the chancre limits itself to an action purely local, neither interfering with the economy nor entailing any general infection; at the most it sometimes extends its influence as far as the glands which receive the lymphatic vessels from the affected region.

In the first case a diathesis is established: it is the economy which is infected. In the second, the chancre

* See Note I.

remains a local lesion, and limits its effects to the region upon which it is developed.

What is the secret of the variety in the consecutive manifestations of the chancre?

Before and since the time of Hunter, up to the present period, syphilographs have explained the reason of the variability of the disease, by a sort of reaction of the organism upon the virulent principle. It was to the difference in the constitutions, temperaments, sexes, idiosyncrasies, &c., that they attributed the difference in the manifestations of the virus. Admitting as incontestable the unity of the cause, they believed in the identity of the effect, and saw only in the variety of forms the result of individual influences. According to this theory, the chancre was a single grain, which ought to produce different fruits, depending upon the nature of the soil in which it was called upon to develope itself. Such, gentlemen, is the ancient doctrine, the doctrine of the unity of the virus.

In the face of and adverse to it, have arisen in our times doctrines which tend to explain the variety of syphilitic manifestations by a plurality of causes. It was in 1815 that we began to doubt the opinion which considered the different effects of the virus to be due to peculiar idiosyncrasies.

Carmichael was the first to raise the standard of revolt against the old ideas.

He proposed to admit four poisons, each leading to certain particular forms of constitutional symptoms. But this fanciful doctrine was unable to sustain a rigid analysis, and was soon discarded.*

This hypothesis of Carmichael was already nearly forgotten, when I, in my turn, in my lectures and writings,

* An Essay on Venereal Diseases, and the Uses and Abuses of Mercury in their Treatment. By R. Carmichael. First edition. 1815.

advanced this opinion: * "that the variety of the morbid manifestations following chancres depended not only upon the condition of individuals, but also upon a *certain variety of causes and of virus.*"

This opinion, which I then advanced under a doubtful form, has since that time been developed by one of my best pupils, who has endeavoured to give to the doctrine of the duality of the virus the authority of historical proof.

Resolving the question which I left undecided, Dr. Bassereau has referred the difference of the manifestations consecutive to chancres to a diversity of causes and to a plurality of sources. According to this doctrine, the chancre is no longer a morbid unit, but a mixed manifestation belonging to *two distinct* pathological species.

Of these two species, one, the simple chancre, would be the *contagious ulcer of the genital organs*, known to and described by ancient authors, Celsus, Galen, &c.; the other, the infecting chancre, would be the primary symptom of an affection of new origin—"syphilis." † There no longer exists here the influence of the soil to modify the grain; it is the variety of the grain which gives birth to different germs.

But let me mention another theory.

Instead of keeping, as in the preceding doctrine, the simple chancre and the infecting chancre distinct, Dr. Clerc, also one of my pupils, considers them only as two varieties of the same virus. According to him, the simple chancre is only a modification of the infecting chancre: it is the result of the inoculation from an infecting chancre upon a subject already affected by constitutional syphilis. Each of these chancres transmits itself singly as a distinct pathological species, and the consequences of contagion are determined, not by any peculiar individual predisposition,

* Lettres sur la Syphilis, XXXIIIème Lettre.

† See Note II.

but by the nature and species of the affection from which the infection is obtained.

For my part, gentlemen, I must allow that I regard favourably those doctrines which tend to multiply the sources of the virus. I see in them, in fact, a brightening confirmation of the opinions which I was the first to advance upon the nature, independent existence, and different prognosis of the two varieties or of the two kinds of primary venereal ulcer.

The necessity of creating at the present day several sources of origin for chancres, shows how correctly I was guided when I endeavoured to point out the differences, and to seek at the bedside those conditions which should one day enable me to distinguish from their commencement these two forms of ulceration.

But, gentlemen, let us put aside theory, and return to our clinical domain.

I have just told you that there exist two forms of chancre; it remains for me to point out to you the characters peculiar to each of them.

I shall consider, in the first place, the simple, non-infecting chancre, that which Dr. Clerc has lately named "chancroid."

PART II.

OF THE SIMPLE CHANCRE (CHANCRE MOU, CHANCRE NON-INFECTANT).

I.

RELATIVE FREQUENCY OF THE SIMPLE CHANCRE AND OF THE INFECTING CHANCRE—DOES THERE EXIST ANY IMMUNITY AGAINST THE SIMPLE CHANCRE?—SUBJECTS, PRETENDED REFRACTORY—THE TWO THOUSAND TWO HUNDRED CHANCRES OF DR. L——.—ON THE INOCULATION OF CHANCRE UPON THE LOWER ANIMALS.

Of the two varieties of chancre, the form most commonly met with is the non-infecting.* It is, then, correct to state, that, in the great majority of cases, the *chancre does not induce syphilis.*

This excess of relative frequency of the simple chancre may be explained as follows:—

* Observe the statistics collected by me, for M. Ricord, during three months amongst the patients of the Midi:—

Number of chancres seen	341
Chancres, indurated or infecting . . .	126
Chancres, simple, not infecting	215

Allowing, also, for cases in which chancres heal *suo sponte*, and do not compel the recipient to present himself at the hospital, and also for cases of balanitis attended by inflammatory phymosis, in which the existence of chancre cannot be accurately determined, it may justly be concluded that of every three chancres contracted, two, at least, belong to the simple variety, one only to the infecting kind. That is to say, that only one chancre in three will induce constitutional syphilis.

M. Puche has found from observation that chancres existed in the proportion of four simple to one infecting.—A. Fournier.

Firstly. The simple chancre is the most abundant source of the chancrous virus; it is the form of ulceration which secretes pus endowed to the highest extent with the property of contagion, and which retains for a long period the faculty of inoculation.

Secondly. It creates no immunity against a renewed contagion of a chancre of the same kind; that is to say, against its reproduction upon the same individual. It is well known, on the contrary (and I shall soon have the opportunity of insisting upon this point), that, as a general rule, the indurated chancre is only produced once upon the same subject.

It is in vain, gentlemen, that you will seek in the peculiar disposition of the organism for prophylactic conditions against this variety of chancre. I do not know, I have never met with a subject refractory to this virus. Before a good lancet, charged with pus taken from a simple chancre, at the period of virulent specificity, there exists no immunity.

This proposition, which I advanced a long time ago, and which the foolish attempts of the believers in syphilisation have not weakened, I again bring forward to-day, strengthened by the experience of twenty-five years.

Neither age, nor sex, nor idiosyncrasies, nor previous pathological conditions, are opposed to the contagion of the soft chancre.

Syphilisators have contradicted me: they imagine that they have found individuals incapable of this contagion. You know, gentlemen, what becomes of this pretended immunity of these invulnerable subjects before a lancet charged with good chancrous pus. Where, then, to-day are the syphilised subjects? Is it the famous M. L——, for example, who, as he himself says, was refractory only in consequence of the impotency of the pus employed for inoculation? Is it that intrepid experimentalist, M. Lind-

mann, who inoculated himself more than two thousand two hundred times without being rewarded with this fortunate saturation, supreme desire of syphilisators ?*

No, gentlemen ; I repeat to you, there exists no immunity against the contagion of the simple chancre. In all cases, as yet, no one has been refractory to the first inoculation. The simple chancre is a grain which takes root upon every soil, and which reproduces itself infinitely upon the same ground.

All that is required is, that the grain be good and fit to germinate.

In default of man, are animals refractory to this virus ? Remark, gentlemen, that I only speak here of a single variety of the primitive venereal ulcer,—the simple chancre. Of all the experiments undertaken up to the present day respecting this subject, the result is, that we have never been able to produce upon animals by direct inoculation an ulceration developing itself extensively and continuously, as is usual with the chancre in man. It limits itself to a small wound, the result of the puncture ; and this wound presents this remarkable character,—it proceeds rapidly to cicatrisation. It is true that if one collected the pus found upon the surface of this ulcer, and replanted it in man, one could reproduce a chancre. But it may be that the virus which serves for this inoculation is only the *human virus* transported to the animal, and preserved upon it, as in a dépôt, after the manner of a grain transplanted in a new soil.

This is certain, that, *transplanted* upon animals, the chancre rapidly dies. A puncture, a small drop of pus, a scab, then a rapid cicatrisation, result from the insertion of the virulent pus. Instead of germinating and extending itself as in man, the chancre lingers and dies upon the animal like a grain upon a foreign soil.

Can one believe, after this, that the chancre (observe that

* See Note III.

I still speak of chancre *in general*, reserving the infecting chancre for after-consideration), can one believe, I say, that the chancre is in reality transmissible to animals? Upon this point I am undecided, and my colleagues of the Midi, MM. Puche* and Cullerier, absolutely refuse to admit it.

II.

SEAT—PARTICULARITY RELATIVE TO THE CEPHALIC CHANCRE; DOCTRINAL IMPORTANCE OF THIS QUESTION.

We come now, gentlemen, to another question of greater interest,—that of the seat of the chancre.

When I considered the two chancres as the result of one poison, I said, without distinction, the chancre can be developed in every region of the body. But to-day, since renewed study has led me to separate most completely these two varieties (I might almost say these two kinds), I modify my proposition.

The indurated chancre, gentlemen, may show itself everywhere. The surface of the body, from the head to the feet, belongs to it. But is it the same with the soft chancre? Permit me, gentlemen, to arrest your attention upon a very singular fact, the secret of which escapes me, and I ask you to meditate at leisure upon this inexplicable mystery. I have shown to you, in my wards, numerous examples of the soft chancre developed on different regions of the body, upon the genital organs, upon the thighs, upon the legs, the arms, the abdomen, the back, the chest, &c. I have shown them to you *everywhere*—everywhere, except on one point,—the *cephalic region*.

It is a fact, gentlemen, that during five-and-twenty

* "I have attempted the inoculation of the chancre upon a considerable number of animals (rabbits, cats, guinea-pigs, fowls, &c.), and have never obtained a single positive result. I affirm that the puncture does not even produce local irritation when left to itself."—M. Puche, comm. oral.—A. F.

years of practice, I have never met with a single well-authenticated case of soft chancre developed upon the face or upon the head; and notwithstanding, I can count by hundreds the examples of cephalic chancre which have been presented to my observation. I have met with them upon all the regions of the head, whether upon the lips, or upon the tongue, or upon the eyelids, or upon the forehead, or upon the nostrils, or, indeed, upon those points where their presence appears to be most inexplicable, even in the middle of the hairy scalp.

Therefore, gentlemen, I say, all these chancres belong always and *most surely* to one single and same kind of chancre—to the indurated species. They are attended by all the symptoms peculiar to constitutional syphilis. Not one remains free from induration, not one confines itself to the limits of a local lesion, without reacting upon the economy, without the phenomena of general infection.*

Once, however, I believed my researches crowned with success. It was upon a patient who had been sent to me from Bordeaux by my excellent colleague, Dr. Venot. This patient presented upon his lip an ulceration of the phagedænic form, simulating at first sight a perfect chancre. The base upon which the ulceration rested only offered a very slight inflammatory thickening, but was absolutely free from the specific induration of the infecting chancre.

* I do not refer to a fact which I published formerly. That observation, relative to a soft chancre of the gum, would appear to furnish an exception the most conclusive, had I not become, since the time when I noted this case, much more observant. I remarked in that observation that there was a non-indurated chancre of the gum, contracted with a woman having chancres, and not followed, after the usual period, by constitutional symptoms; but I should have added that *I did not see the woman* who had communicated this ulceration, and that the only evidence of her having chancres consisted in the patient's statement! It is equally important to observe that *I did not have recourse to artificial inoculation*, as a last *criterion;* and that, consequently, the correctness of the diagnosis and the absolute value of the observation may be doubted.—Ricord.

I quite thought at first that it was a soft chancre of the lip affected by phagedæna. It was in vain that I explored the submaxillary region in order to find a bubo, symptomatic of the soft chancre: I could not establish the least glandular enlargement. Further, when I came to analyse more attentively the ulceration before me, I recognised rather the characters of a variety of lupus than those of a veritable chancre. The patient objected to inoculation, and the nature of the affection remained at least *uncertain*.

Since that period, gentlemen, I have never observed a second, analogous to the above case. My colleagues of the Midi have not been more fortunate than myself. MM. Puche and Cullerier still affirm that they have never met with a single instance of the soft, non-infecting chancre on the cephalic region.

Let us overstep the bounds of this hospital. Let us interrogate the annals of science; let us search the statistics, French and foreign. Do you know with what information this inventory will furnish us? Two cases of labial chancres, non-infecting, not followed by constitutional syphilis.

But these two observations, the first of which belongs to my pupil and friend, Dr. Bassereau, and the second, to one of my colleagues, are not, perhaps, sufficiently complete to be taken into serious consideration, and to constitute an exception to this rule, which, up to the present time, appears to be general:—*induration*, constant; the *character* of the cephalic chancre, most certainly infectious.

Pardon me, gentlemen, this severity towards others, as well as towards myself; for one cannot surround himself with too many guarantees against error in a question of this kind, the solution of which involves the most weighty doctrines respecting syphilis. I do not deny the existence of the *soft* cephalic chancre; I do not contest the possibility of its occurrence. On the contrary, I believe that it ought to exist,

and long to find it, for, I repeat, I require it for a new point of doctrine. But I can only speak to you of facts, and I maintain in consequence this proposition—"that up to the present day there does not exist one well-authenticated case of soft chancre developed on the face, or, still more generally, of *chancre mou céphalique*."

And yet, gentlemen, it is the soft chancre which is the most fertile source of virulent pus; it is the pus of the soft chancre which is the most easily and for a long time contagious; it responds the best to inoculation.

Why, then, is the cephalic region refractory to its powerful virus? That, gentlemen, is an all-important question, the value of which you will better understand when I shall have discussed before you the mode of transmission of different varieties of the chancre. The apparent immunity of the cephalic region against the contagion of the soft chancre is a fact worthy of note, and which I regret to see eluded by puerile excuses or unacceptable interpretations.*

But putting aside this exception as yet inexplicable, the one and the other variety of primitive ulceration may be met with everywhere, upon the whole extent of the teguments. And if the chancre, whichever it be, affects more often certain organs,—as, for instance, the glans and the vulva, and certain parts of these organs in particular,—that depends, you readily understand, only upon the manner in which it is contracted, and not upon any special tendency of these parts to inoculation.†

* See Note IV. † See Note V.

III.

MODE OF PROPAGATION AND CONDITIONS OF DEVELOPMENT OF THE CHANCRE —OF INOCULATION, AND OF THE CHANCRE OF INOCULATION—OF PRIMITIVE ECTHYMA.

Next to the question of seat, let us study, gentlemen, the mode of propagation and the conditions of development of the primary venereal ulcer.

Is there need of a vital act in order that the chancre may be transmitted? The venereal orgasm, the cynic spasm, are they necessary to the propagation of the virus? Misplaced credulity, gentlemen; forsaken doctrines. The physiological conditions of the genital act play no part in the contagion. It is the result of the application of the virulent pus to the tissues, *no matter how effected.* But the tissues must be in a condition favourable to the reception of and of submission to the influence of the contagious pus.

The condition the most favourable to contagion is a solution of continuity, a tear, a wound of some kind, especially if recent, seated upon the organs exposed to such an accident. It is, in fact, upon the parts the most susceptible of being torn, by reason either of the fineness of their tissues, or of their peculiar anatomical formation, that we see the chancre most often developed. That explains, for example, its predilection for the inferior commissure of the vulva, for the frænum, for the mucous surface of the prepuce, &c.

Suppose, on the contrary, that a part of the integuments, quite sound and covered with a good epidermis, be exposed, during a longer or shorter time, to the contact of the virulent pus; this contact will be almost certainly without result, and the contagion will not be effected. It is due to the immunity of the surface, exempt from all ulceration, and provided with a resisting epidermic covering, that

we are permitted daily to touch and handle several hundreds of chancres, without exposing ourselves to contagion. The same reason explains to you how a person may escape contagion during intercourse with a woman affected with chancres.

This immunity extends even to the mucous surfaces which are covered only by an epithelium, much less thick and more readily wounded. M. Cullerier, our learned and industrious colleague, has proved, in two remarkable cases, that a sound mucous surface may be exposed for a certain time to the action of the virulent pus without becoming the seat of a chancre.*

You must not always believe, gentlemen, that the penetration of the virulent pus is effected by a solution of continuity, or, if I may use the expression, by doors thrown open to receive it. The pus of the chancre can of itself *prepare the way* and open the trench.

But, then, see what happens: placed upon the surface of the teguments, this pus, very acrid, very irritating, develops an excitation analogous to that which the application of every irritating substance produces upon the skin—erythema arises. Moreover, the cause of irritation subsisting, a superficial ulceration manifests itself; the epidermis is eroded, and the dermis is denuded. From that time the solution of continuity is established,—the trench is opened, and the virulent pus penetrates into the organism.†

There exists, then, a double mechanism for the production of the chancre: first, contact of the virulent pus with the

* See Note VI.

† We understand the slow manifestation of some chancres, and their prolonged period of incubation, concerning which so much has been said, when we take into consideration the two following circumstances:—Firstly, the virulent pus may remain a long time separated from the ulcer which produced it, without losing its contagious properties;—secondly, it may rest without action upon the tissues, until these latter, irritated and denuded by the contact of the virulent pus, offer a way of entry to it.—R.

ulcerated surfaces, — contagion immediate, *instantaneous;* second, deposit of the pus upon healthy surfaces, which become eroded and ulcerated, — inoculation consecutive, *retarded* by the resistance of the tissues.

So much, gentlemen, respecting the conditions appertaining to the tissues: let us now study those appertaining to the virulent matter.

It suffices for contagion that the pus has undergone no alteration. It is not necessary that it be transferred by a subject already infected to the person about to become infected; neither is it necessary that it be warm and recent. I have been able to preserve the virulent pus in well-closed tubes during eight, ten, fifteen, and even seventeen days, without depriving it of its poisonous properties.

But if this pus should be in any way altered by chemical agents or organic changes, as, for example, gangrene,* it loses from that moment its essential property. It is no longer contagious; it is no longer inoculable.

As to the mode of transport, I need not tell you that it is essentially manifold and variable. Every *imaginable* contact may give origin to a chancre. Of the different modes of contagion there is one which art can adopt, and which I often have recourse to; it is *inoculation*.

Inoculation, gentlemen, is an artificial contagion; it is, as has been remarked, art imitating nature. Observe what the practitioner does who wishes to inoculate a chancre: — he effects a small wound, and places therein a drop of the virulent pus. Now, let me ask you, does Nature adopt other means in order to sow the same seed?

There exists, then, no difference between the inoculation physiological and the inoculation artificial. The chancre produced thus with the point of the lancet is the analogue

* In the course of the year, seven inoculations have been practised with the pus taken from gangrenous chancres, and seven times the inoculation has remained negative. — A. F.

of the ordinary chancre, as the variola of inoculation is the analogue of the spontaneous variola.

As regards the pathogony of chancre, inoculation furnishes us with a valuable means of producing at pleasure the pathological kind, the characters of which we are anxious to study, and affords us the opportunity of watching its development from the very first moment of its existence.

I will suppose, then, that you have effected a slight puncture under the epidermis with a lancet charged with virulent pus.

What happens?

Remark, I beg, that the phenomena will be immediate, and that the morbid action dates from the moment at which the specific cause comes into contact with the tissues.

The puncture begins to redden, and to surround itself with a slight inflammatory areola; it swells, whilst its circumference enlarges, and soon a papule is observed. At the summit of this papule the epidermis is raised; a small vesicle appears, full of serosity; it increases; its liquid contents become clouded, then purulent, and a true pustule is established.

This pustule is depressed at the centre; then, after a certain time, it sinks, and becomes flattened. Now one of two things happens: either the pustule bursts, leaving exposed an ulcer of equal extent, which constitutes the veritable chancre; or it remains intact, dries up, and becomes covered with a brownish scab, which increases in an equal ratio with the ulceration which it conceals. At this period, if you raised the scab, you would find beneath it the specific ulceration of which I have just spoken.

Supposing, then, the ulceration exposed to view, let us note its characters.

It is an ulceration which presents itself under a special aspect, and under a peculiar form. Its circumference is very regularly *rounded*, provided that the pustule be de-

veloped upon homogeneous tissues. Its borders are *cleanly cut*, as if a portion of the tissues had been punched out; they are, moreover, somewhat everted, and slightly undermined. With a glass one may observe that they are inconsiderably notched. The floor of the ulcer, the most often irregular, as if worm-eaten, is generally of a greyish colour; it appears to be covered by a lardaceous material, a sort of *pseudo-membrane*, very adherent, and which cannot be detached by washing. The base upon which the ulcer rests is in general thickened and engorged; it is circumscribed by an areola of a reddish colour, sometimes violet, more or less extended around the circumference of the ulceration.*

This ulcer grows and extends itself. It secretes in general a pus, ill-formed, watery, reddish, charged with organic detritus, sometimes, however, creamy, thick, and truly phlegmonous; a pus sufficiently analogous, judging from its external characters, to the secretion of ordinary wounds; but a pus *specific*, in consequence of the virus which it holds in suspension.

After having progressed a certain time, the ulceration may rest stationary. It is the period of statu quo specific, during which the humour secreted preserves the characters of virulent pus.

Then, under the influence of nature, or by the assistance of art, the work of cicatrization begins. The bottom of the ulcer cleanses itself and assumes a rosy tint, analogous to that of wounds which granulate; the edges sink; the areola

* When the whole extent of the ulcer is not situated upon homogeneous tissues, as happens when one portion is placed upon the inner surface of the base of the prepuce and the other upon the glans penis, the chancre loses its circular form. The same occurs when the chancre establishes itself in a previous solution of continuity, as in the fissures of the prepuce, of the fourchette, of the anus, &c., . . . and when it developes itself in the folds and recesses formed by the falling together of neighbouring parts. Add also, that several chancres running one into the other may thus lose their circular form. (Notes to Hunter, Ricord.)

disappears; the engorgement of the base diminishes; and cicatrization, proceeding from the circumference towards the centre, finishes by completion. In this last stage, the specificity is extinguished; the pus secreted is only analogous to that of simple wounds; it has lost every virulent property.*

The above, gentlemen, is a sketch of the chancre by inoculation—the model form of the chancre. As you see it, the chancre of inoculation is a pustular affection. It is a pustule which conceals an ulceration, and nothing more. It is an *ecthyma* of a destructive tendency, charged with a contagious and specific pus.†

The chancre of natural contagion, is it produced likewise under this form? Yes, gentlemen, and I do not hesitate to say that it is the more often the analogue of the chancre produced artificially with the point of the lancet. It is, from its commencement, a pustule of ecthyma, only we are rarely called upon to confirm its presence under this form, essentially initial, because it is not in a condition so favourable to its complete and *regular* development as the artificial pustule, protected from injury from without by, and observed under, a watch-glass.

But this pustular form is not the only one under which the chancre of contagion presents itself. There is another which it often assumes, and these are the conditions under which it is observed. It is when the virulent pus is applied

* Hunter on the Bubo, ch. I.

† It is curious to see what M. Gibert, who denies the pustular debut of the chancre, has written, at page 258 of his "Manuel des Maladies de la Peau" (edit. 1839):—"The inoculation by the lancet of the venereal virus is followed by a pustule, to which succeeds an ulcer resembling a chancre in all its characters."

I should think that, this point once admitted, my learned colleague would have been able to allow that it is very possible that in sexual intercourse, or otherwise, he might meet with a circumstance analogous to that which the lancet gives birth to; that is to say, the insinuation of pus under the epidermis or the epithelium.—R.

to a denuded surface—to a wound, or to an excoriation. The pustule is physically impossible upon a surface where the epidermis no longer exists. Likewise, the ulceration is produced directly (*d'emblée*).

The ecthymatous pustule,—the ulceration immediate (*d'emblée*). These, gentlemen, are the two forms under which you will meet with, the most often, the chancre at its debut. There are yet others which I could point out to you, such as the furunculous form, which frequently succeeds to, in the groin, the inoculation of the bites of leeches; the form by abscess, much more rare, &c. But I pass rapidly over these exceptional cases, in order to dwell upon the question of the greatest interest.

That which I have just said, gentlemen, respecting the inoculation and the development of the chancre is applicable almost as much to the one as to the other of its varieties. I must now proceed to consider more especially the history of the simple chancre, and the study of those pathological signs which ought to allow us to distinguish it from its congener.

IV.

CHARACTERS PECULIAR TO THE SIMPLE CHANCRE—STATE OF THE BASE.

The chief character of the simple chancre, the one which you see me inquire into at first, when I examine a patient, is the *state of the base* upon which it rests. This base, gentlemen, may be free from all inflammatory engorgement; it may offer to the finger a suppleness almost equal to that of healthy tissues. In this case the diagnosis is established without difficulty. But it may happen also that the tissues which support the chancre are the seat of a thickening, more or less considerable, and present an unusual resistance. If, then, you seize this base with the finger and thumb, and press it gently, so as carefully to appreciate the degree of

resistance of the parts, you will experience exactly the same sensation as if you compressed the engorged base of a boil. It is a tissue, hard, dense, resisting, which you hold between the fingers; but this hardness, which I call *phlegmonous hardness*, is very distinct from the specific induration which belongs to the other variety of chancre, which I shall soon introduce to your notice.

Hardness, *induration*, gentlemen, these words may seem to you quite synonymous, still, however, they convey very different meanings. The words alone resemble each other, and the interpretations which they admit of are most dissimilar, and very readily distinguished.

The character of the base is the first and most important sign which it is necessary to interrogate in a methodical examination of a chancre. I do not hesitate to say, that this sign alone would most generally suffice to distinguish between the two varieties of the primary venereal ulcer.

Such is, nevertheless, the abundant semiology of syphilis, that it furnishes us with additional elements to aid in the diagnosis, amongst which number bubo takes the preference.

V.

CHARACTERS PECULIAR TO THE SIMPLE CHANCRE—BUBO—THE BUBO IS ONLY PRODUCED IN THE SUPERFICIAL GLANDS — IT NEVER OVERSTEPS THE FIRST GROUP OF GLANDS WHICH RECEIVE THE LYMPHATICS FROM THE DISEASED PART—THE BUBO IS SYMPTOMATIC OF THE SIMPLE CHANCRE —DOES THE BUBO NECESSARILY FOLLOW THIS FORM OF PRIMARY AFFECTION?—TWO VARIETIES: BUBO SIMPLE; BUBO SPECIFIC, OR BUBO OF ABSORPTION, GLANDULAR CHANCRE—BUBO PHAGEDÆNIC—EPOCH OF APPEARANCE — BUBO SPECIFIC, EVEN THREE YEARS AFTER THE DATE OF ORIGIN OF THE CHANCRE.

The chancre *may* or *must*, according to its nature, exercise an influence over the glands which receive the lymphatic vessels, from the region which it occupies. It is a very

remarkable fact, that this symptomatic bubo is only produced, as Hunter has shown, in the superficial glands; it is always limited to the first group of glands, into which the lymphatics of the diseased part empty themselves.

Never in the deeply situated glands, never in the lymphatics which lead to them, or which proceed from them, will you meet with that which characterises the specific bubo; namely, the virulent, inoculable, *primitive pus*. There is at that point, then, as I have written elsewhere, a sort of barrier which the chancrous pus cannot overstep, and this barrier is the first group of glands which are in direct communication with the chancre.

But another still more remarkable circumstance is this, that one of the superficial glands suppurates *specifically*, and is converted into a veritable *chancrous depôt*, whilst the absorption of the pus of this bubo neither infects the lymphatics which emerge from it, nor the gland next in order, as if the virulent infection had not the power of transmitting itself from one gland to another through the medium of the interglandular lymphatics.

This remarkable fact, deduced from the most attentive clinical observation, has not, as yet, been explained by theory. Hunter, who interpreted it, or thought to interpret it, by an "inaptitude of the deep glands to become the seat of venereal irritation,"* has in reality done little towards determining the question.

But whatever may be its explanation, the fact is certain, and I may give you as proved this proposition,—"the morbid influence of the chancre is limited to the first group of glands nearest to the ulcerated surface; it never oversteps it; it never extends *beyond it*.† Nevertheless, the following fact

* Hunter on the Bubo, ch. i.

† Understand, that I do not refer here to the secondary bubo, constitutional bubo, manifesting itself at a more remote period, under the influence of the acquired diathesis, and free from any anatomical relation with the seat of the original ulcer.—R.

would appear to negative the preceding proposition. It often happens, that an individual, the subject of a chancre on the penis, on the *right* side, for example, presents a glandular enlargement of the *left* groin. The indispensable relation between the chancre and the bubo in this instance appears to be at fault. But it is not in the least so, for anatomy explains to us this apparent exception to the general rule, by the crossing of the lymphatics over the median line. The chief fact in the history of bubo is this, that each of the two varieties of chancre influences the glands in a *special* manner.

The chancre, simple, non-indurated, does not necessarily influence the glands; often, indeed, very often, with this form of primary affection, the glands remain tranquil and cold.*

But this influence gives rise to symptoms very decided, and *very different to that which accompanies the other variety of the chancre.* It is an *acute bubo* which manifests itself, an inflammatory bubo, painful from its debut, progressing rapidly, and almost necessarily, to suppuration; capable, in short, of reproducing an affection analogous to that which gave birth to it, that is to say, a veritable glandular chancre. Moreover, this bubo in general only affects one of the glands of the region in which it is produced.†

* Observe certain figures, relative to this subject, collected during the year by my "Interne:"—

"Patients affected with simple chancre . . .	207
Simple chancres with bubo	65
Simple chancres without bubo . . .	142"

A. F.

† You can understand that a chancre which covers a large extent of surface may be, at the same time, in relation with the mouths of several lymphatic vessels of a different order, and that thus several glands may be infected at once; a circumstance still more likely to happen in cases where several chancres exist, when it is not rare to see them attended by a double inguinal bubo.—R.

The bubo, symptomatic of the simple chancre, offers two varieties, which correspond precisely to the double influence which the chancre is able to exercise upon the glands. The chancre is at the same time *a cause of common irritation* and a *source of specific virulence*. It may affect the glands after the manner of a simple wound, or of some excitant; in the first instance it is a simple inflammatory point embedded in the tissues; or else it acts through the medium of the pus which it secretes, and which, conveyed into the glands, inoculates them directly; it is in this case a virulent grain.

If the chancre only reacts upon the glands as a common irritant, the bubo which follows is a *simple adenite*,* which presents in its development and in its progress the characters peculiar to non-specific adenites; it is a glandular phlegmon which follows the course of all phlegmons, which may terminate in resolution or in suppuration, but whose pus never presents any specific virulent character.

Such is not the second variety of bubo, that which recognises for its origin another element than simple irritation. In this case, too, it is an acute, inflammatory bubo which manifests itself, but its termination is very different. *Resolution is impossible;* it suppurates *surely* and *necessarily*. Moreover, it is not a *simple* pus which the affected gland secretes; it is a pus *virulent, par excellence*, which by inoculation reproduces the pustule of chancre. At length the wound which succeeds to the opening of the bubo, being directly inoculated by the glandular pus, takes on the characters of the specific ulceration, and may experience its different deviations.

What, then, has taken place in this latter case, and what conditions give to the glandular pus properties analogous to those of the chancre itself?

* Inflamed gland.

Note the explanation of this phenomenon :—the virulent pus, which bathes the surface of the primitive ulceration, penetrates the ulcerated and open extremities of the lymphatic vessels ; this pus traverses rapidly the canals of absorption, which it generally leaves intact, probably by reason of the great rapidity with which the circulation in these canals is effected ; then it reaches the glands. Retained in the interior of these organs, whose action is, as you are aware, to delay the course of the lymph which they ought to elaborate, the virulent pus exercises in them its specific action, that is to say, it produces a veritable *inoculation*, soon to be followed by the formation of a chancre. It is then, gentlemen, a true chancre which developes itself in the gland, and with peculiar characters, —"ulceration, secretion of a virulent pus, inoculability of the pus secreted."

And now you understand why, in this variety of bubo, suppuration is certain and necessary ; it is, in fact, the exordium of the affection itself; it constitutes the primary manifestation, the essential symptom.

Such is, gentlemen, the variety of the specific adenite, to which has been given the very expressive name of bubo of absorption.

But pathological facts are not always so simple as the requirements of didactic divisions represent them to be. We have described separately the inflammatory bubo and the bubo of absorption as two diseases, very distinct, very determined, and produced singly. But you must remember that often, and the most often, these two elements, inflammation and virulent specificity, are found united and associated.

The two bubos are produced side by side, each preserving the characters peculiar to itself ; the one furnishing a simple phlegmonous pus, the other a virulent, inoculable pus. Remark the succession of phenomena : the glandular chancre is

produced, and is not slow to determine the purulent degeneration of the gland. This affection provokes, in its turn, an inflammatory reaction in the adjacent cellulo-adipose atmosphere which surrounds the gland, and sets up in it a morbid softening, soon followed by suppuration. Hence, two different lesions, two distinct foci. At this stage, then, two purulent collections exist; the one encysted in the glandular capsule, the other free, diffused, on the exterior of this capsule.

At this period, you may make the following experiment: attack the bubo cautiously, by dividing the structures, layer after layer; take a drop of the first portion of pus which you meet with under the bistoury, and practise inoculation with the pus from the most *superficial focus;* then plunge the bistoury deeply into the swelling, in order to open the glandular capsule, and practise a second inoculation with the pus *coming from the gland.* If the experiment has been well performed, and if the purulent discharges have not been mixed, I predict, without fear, that the first of your inoculations will rest sterile; and that the second will furnish the pustule characteristic of the chancre.

These are the chief differences, without doubt; however, I am about to notice a fact still more important, which will lead you better to appreciate the distance which separates the purely inflammatory adenite from the veritable bubo of absorption.

It is this.

The wound which succeeds to the opening of the phlegmonous adenite is a simple wound, which cicatrizes rapidly without undergoing any complication.

Remark, on the contrary, what follows the opening of the bubo of absorption. The wound made by the bistoury is immediately inoculated by the glandular pus, and transformed into a veritable chancre. In a few days it assumes all the charcters of the venereal ulcer: "borders everted; floor

greyish ; suppuration specific ; pus inoculable ; tendency progressive, &c." Add, also, that it may undergo all the accidents, all the deviations, of the chancre, and above all, the most terrible, the *phagedænism*.

You are all acquainted with the patient in my wards, who has, at the present time, on the right knee an enormous chancre, of the breadth of two hands. I will give you, in few words, the history of his long martyrdom.

Eight years ago, he contracted a chancre of the penis ; a simple chancre, attended by an acute bubo. The chancre healed after same weeks ; in its turn, the bubo took on suppuration ; the consecutive wound was not slow in assuming the aspect of a chancre, and then experienced the phagedænic deviation. From that time, notwithstanding all our efforts, the ulceration invaded the whole corresponding inguinal region, ascended towards the loins, and extended itself, at the same time, upon the gluteal region, and upon the flank ; then redescended upon the thigh, ploughing up the whole length of its external surface ; having reached the knee, passed it, and finally lingered at this level, upon the enormous surface which it still occupies.

This, gentlemen, is the bubo of absorption, the glandular chancre !

To be brief, two kinds of bubo may accompany the simple chancre ; the one, *simple* inflammatory adenite, bubo sympathetic, *susceptible of resolution* or *suppurating without virulent specificity ;* the other, bubo specific, true glandular chancre, *suppurating surely*, secreting an *inoculable pus*, and converting the wound following the opening of the purulent focus into a chancre.

Moreover, when you are acquainted with the glandular enlargement symptomatic of the other variety of chancre, you will still better appreciate the value of the characters which I have just pointed out to you, and you will be better able to establish in your own minds the necessary

relation of the bubo with each corresponding variety of the primitive venereal ulcer. Previous to the period of appearance of the adenite symptomatic of the non-infecting chancre, there is no diagnostic sign of a certain importance. Whereas, in the case of the indurated chancre, the appearance of the adenopathy* is almost immediate, and coincides generally with the period of induration of the chancre; here, on the contrary, there is *no fixed period* for the glandular affection in relation to the simple chancre. The adenite of absorption, like the sympathetic adenite, may be delayed; it does not always manifest itself, as the indurated bubo does, in the course of the first or second week; it may, indeed, show itself much later, and sometimes even at a very distant period from the debut of the primary affection.

Thus, my worthy colleague, M. Puche, has seen a virulent adenite arise *three years* after the date of a simple chancre, of the serpiginous form. This adenite suppurated, and the pus, tested by inoculation, gave rise to the pustule characteristic of chancre. That was a good example of the bubo of absorption, a specific bubo, produced three years from the date of the debut of the affection.†

I have spoken, gentlemen, of the bubo symptomatic of the variety of the chancre with which we are actually occupied; allow me now to return to the subject of the chancre itself, which you at present only recognise by the state of its base and the character of the adenite which accompanies it.

* An enlarged gland, indolent and painless. † See Note VII.

VI.

CHARACTERS PECULIAR TO THE SIMPLE CHANCRE—FORM OF THE ULCERATION —MULTIPLICITY—PERSISTENCE OF THE VIRULENT SPECIFICITY AND OF THE INOCULABILITY—DURATION—DESTRUCTIVE TENDENCY—PHAGEDÆNISM.

By its aspect alone, *de visu*, the simple chancre may be often distinguished from the opposite kind. A practised eye recognises it by its borders, *neatly shaped* and *cut perpendicularly*, as if the wound had been punched out; by its floor, remarkably irregular, worm-eaten, fretted, &c. But I shall pass over these details of form and aspect, not having had as yet the opportunity of introducing to your notice the other variety of the primary affection. We will return to them. The simple chancre is the form of ulceration which presents, in the highest degree, the character of specific virulence. It infects, it inoculates, everything that it touches. Again, you will meet with, in general, *several* soft chancres on the same subject;* again, you will too often see them multiply with a desperate fecundity, by a *series of successive inoculations*. It is much less common to meet

* Observe the statistics in refcrence to this subject, collected during the year, in my wards :—

"Patients affected with simple chancres . . .		254
,, ,, with a singlc simple chancre .	48	
,, ,, with scveral simple chancres .	206	

"Thesc 206 patients are arranged in different groups, as follows :—

"Patients having two simple chancres	32
,, ,, from three to six simplc chancres .	116
,, ,, from six to ten	41
,, ,, from ten to fifteen	8
,, ,, from fifteen to twenty . . .	4
,, ,, twenty and more simple chancres .	5
Total	206"

A. F.

with a single simple chancre than a series, than a plëiade, if I may use the expression, of chancres of this nature. And I should add, that this *multiplicity* of ulcerations is not without importance in a diagnostic point of view.

It is the simple chancre which furnishes the most fecund source of virulent pus; the ulceration which it produces secretes in large quantities the specific virus.

It is this variety which preserves during the longest time the characters of virulence.

You are aware that the whole existence of the primary venereal ulcer consists of two periods essentially distinct; the one, of progress, during which the chancre preserves its characteristic faculty, namely, the inoculability of its pus; the other, the period of decline or of repair, when the virulence is extinguished, and leaves no other character than that of a phlegmonous suppuration, free from all specificity.

Of these two periods, the first constitutes almost the whole existence of simple chancre. Consult the results furnished by inoculation, and you will see the pus reproduce the specific pustule, that is to say, preserve its character of virulence almost up to the period of cicatrization.

At the last period, when, from the aspect of the ulceration, you would judge the chancre to be extinguished, the virus may still persist, sufficiently active at some points to transmit and reproduce itself. The specificity often persists in the centre, although the work of reparation has already begun at the borders of the ulcer; the chancre still lives by the side of the cicatrix, which tends to overspread it, and it is only at the last moment of its existence that it loses its virulent property.*

It may, therefore, be said that at *almost* every period the simple chancre furnishes an inoculable pus.

* See Note VIII.

The pus of the soft chancre, gentlemen, is the virus which gives results with certainty, the poison to which none are refractory.

You will know hereafter if the pus of the indurated chancre yields so readily to inoculation.

The simple chancre recognises no prescribed duration. Without doubt, in the great majority of cases, it cicatrizes in the course of a few weeks; but it is not unusual to see the period of repair delayed much beyond this term.

It is the form of chancre which *persists the longest*, and which persists in preserving, as I have just told you, its virulent specificity almost up to the last moment of its existence.

The simple chancre produces an ulceration of a destructive tendency. It displays itself, in general, over a greater breadth of surface than the indurated chancre, and ploughs up on a more extended scale the regions in which it is developed.

Moreover, it is the form which experiences the most frequently that terrible complication, *phagedæna*.

These are,—gentlemen, recognise them well,—these are those *simple, non-infecting chancres*, not followed by constitutional syphilis, which the most often have produced the frightful devastations of which you have read the fatal history.

These are those simple chancres which, in a great number of cases, have destroyed the penis, have eaten out vast caverns in the inguinal regions, and destroyed considerable portions of the tissues. It is a simple chancre, of glanular origin, which, upon a patient treated in our wards, has successively overrun and ploughed up, during eight years, the inguinal region, the flank, the loins, the gluteal region, the whole thigh, and which, now even, occupies the region of the knee.

Do not imagine, however, that phagedænism is a

complication which belongs exclusively to this variety of chancre; the other variety is not exempt from it.

But, as I shall soon have the opportunity of telling you on the one hand, the indurated chancre is rarely complicated with phagedæna; on the other hand, when phagedæna does attack the infecting chancre, its ravages are much less extensive than when complicated with an ulceration of the opposite nature.

I have now, gentlemen, explained to you in detail the different characters of the simple chancre; and, to sum up in few words, I may observe that—

The simple chancre is a chancre whose base remains soft, or only presents an inflammatory thickening; which does not react upon the glands, or which influences them in a peculiar manner, by producing an inflammatory adenite, acute, monoglandular, suppurating almost certainly, and furnishing most generally an inoculable pus;

Chancre, with edges neatly shaped and cut perpendicularly; the floor irregular and worm-eaten;

Chancre, ordinarily multiple, or multiplying itself by a series of inoculations of the neighbouring parts;

Chancre, with pus, virulent and contagious, *par excellence*, preserving during a long period the characters which constitute its specificity;

Lastly, a chancre with a destructive and invading tendency; the form of ulceration the most apt to experience the phagedænic complication.

VII.

DIAGNOSIS—THE ONLY CERTAIN SIGN IS INOCULABILITY—THE NATURE OF THE CHANCRE IS IN THE PUS WHICH IT SECRETES.

However decided, however special, the external characters of the chancre may be, they are not sufficient to establish, in a determined and *absolute* manner, the diagnosis of this

affection. The seat of the affection, the rounded form of the ulceration, the floor greyish, rugous, worm-eaten, and covered by an adherent pseudo-membrane, the borders undermined and sharply cut, the secretion rusty and sanious, the circumference of the areola of a violet colour, the progress and march of the affection, &c., constitute, without doubt, signs of the highest importance, and which together are of great value. But all these characters, isolated or grouped, are only presumptive, and afford no absolute certainty in the diagnosis. But there is one sign which alone suffices to establish the diagnosis, and which, I do not hesitate to affirm, constitutes the only pathognomonic character of the chancre.

Of all the ulcerations of common origin, venereal or even syphilitic, there is only one the pus of which is capable of producing by *inoculation* an ulceration similar to that which gave rise to it; it is the chancre. The *inoculability* of the pus secreted is the only absolute sign of the virulent specificity. It is the character pathognomonic of the chancre, and the only one which can be trusted in forming a correct diagnosis.

The chancre, as I have often remarked, exists neither in its form, nor in its floor, nor, in an absolute manner, in any one of its external characters. *Its nature is in the pus which it secretes.*

But the virulent and specific character of the ulceration being recognised, the question of diagnosis is not settled. The chief problem remains to be solved; it is to assign to the chancre its *variety*, and by it to determine the prognosis and treatment.

I reserve the question of differential diagnosis, upon which I shall dwell at some length, until that I have described to you the infecting chancre.

VIII.

PROGNOSIS—THE SIMPLE CHANCRE DOES NOT INFECT, DOES NOT CREATE A DIATHESIS; IT IS A CHANCRE WITHOUT SYPHILIS.

I hasten to discuss the most weighty question relative to the variety of the syphilitic ulcer of which we have treated up to the present; I wish to speak of the *prognosis*.

Hunter had observed that the chancre was, on certain subjects, a *purely local* affection. He affirmed that *infection might be prevented* by early and well-directed therapeutical means.

This truth, which the great Hunter recognised in arranging all the varieties of the chancre under one head, I, in my turn, reproduce to-day; but that which he attributed to the influence of medicine, I attribute to the special form of the primitive ulceration, and, perhaps, to a difference in the nature and origin of the virulent pus.

Moreover, at the same time that I create these distinct nosological varieties, I assign to each of them its peculiar characters and consequences.

Without doubt, there are some chancres which *infect* the economy, whilst there are others which *do not infect it*, and that, let it be understood, independently of every therapeutic influence. The one creates a diathesis, a morbid temperament; the other limits itself to a simple local lesion.

And I add:—

Certain characters very well marked, certain signs important, palpable, evident, which may be examined by the eye and explored by the finger, permit these two ulcerations to be distinguished the one from the other, from their *commencement:*

It is now nearly twenty-five years that I have laboured to establish, to characterise, and to signalise these differences.

It is, then, with the authority of a matured experience that I am able to form the following prognosis.

"The simple chancre, with soft base, is an affection *purely local, which limits its effects to the region which it attacks; which never exercises a general influence upon the system,* which is *never accompanied by constitutional affections.* In other words, it is a chancre which does not infect the economy, a chancre without syphilis."

You, gentlemen, who attend the practice in our wards, and observe the sad picture which syphilis presents, you feel, without doubt, all the importance of this prognosis; you understand if it is a matter of indifference for the patient and the practitioner to know, a chancre being acquired, what are likely to be its consequences; to know if this chancre will limit itself to a simple lesion of the affected part, or if the whole economy is fated to retain, perhaps for ever, its ineffaceable stain.

As regards, gentlemen, this question of prognosis, I have the assurance to maintain that it may *be decided, in the great majority of cases,* by taking into consideration those characters which I have just pointed out to you, and those concerning which I shall soon speak to you. I assert that the signs by the aid of which these two varieties of the chancre may be distinguished the one from the other are so decided, so plain, so absolute, that a sure diagnosis may be generally made at the *first examination,* and that those rare and *exceptional* cases, which might induce an experienced practitioner to suspend judgment at first, will be cleared of all doubt in the course of a few days.

I have now discussed the general consequences of this affection, and shall presently proceed to consider the *local* prognosis.

IX.

LOCAL PROGNOSIS — TREATMENT — CAUTERIZATION — CARBO-SULPHURIC CAUSTIC—REGULAR TREATMENT OF THE CHANCRE—OF PHAGEDÆNISM—CURATIVE INFLUENCE OF ERYSIPELAS OVER PHAGEDÆNISM—PARTICULAR INDICTIONS FURNISHED BY CERTAIN CHANCRES—INUTILITY OF ANTI-DIATHESIC TREATMENT AGAINST THE SIMPLE CHANCRE—SYPHILIS CURED AT ONCE AND RADICALLY.

You have already foreseen that this difference in the prognosis between the two varieties of the chancre ought to lead to similar therapeutical differences.

In the case of the indurated chancre, it is the diathesis which it is necessary to combat, and, consequently, the necessity of general treatment is evident.

In the case of the simple chancre, on the contrary, there is no diathesis; and, consequently, the inutility of all preventive treatment, destined to warn the economy against those symptoms which will never appear, is manifest.

It is, then, simply local treatment which the soft chancre requires.

But, gentlemen, recollect that this treatment assumes an importance peculiar to itself, by reason of the accidents which complicate, as if by preference, this variety of the primary venereal ulcer. If, on the one hand, the simple chancre respects the economy, on the other hand, it manifests a great disposition to extend itself, to multiply, to produce acute bubos, almost certain to suppurate, and that suppuration virulent; and, lastly, to undergo the terrible complication of phagedænism.

It is, then, against the form and local complications that we must direct all our curative resources.

I will tell you in a word the grand secret in the treatment of chancre. It is this: "to reduce the specific ulceration to the state of a common ulcer; and to transform a wound possessing a special principle for its maintenance into

a wound which no longer has such a resource. Such is the indication to be fulfilled."

This object is effected in the most marked manner by cauterization. Not a slight, superficial cauterization which only destroys the surface of the ulcer, but a cauterization deep, broad, and destructive.

Also, in order that it may be effected, this cauterization must be done according to certain rules, which I will point out to you in few words. Whatever caustic is employed ought to be spread over *the whole surface* of the chancre, and even a *little beyond it.* It is very important that the destructive action should surpass the circumference of the ulceration; for not only does the virulent specificity occupy the area of the chancre, but also extends beyond it, to a variable and uncertain distance; so that the adjacent tissues, apparently healthy and intact, bear in them the germ of the poison. This infected peripheric zone ought also to be destroyed by the caustic.

The selection of the caustic to be employed is not altogether a matter of indifference. Reject at once all mild caustics, which only act more or less as anodynes. That which is required in this instance is a destructive agent. To which then should we give the preference? I have successively tried the Vienna paste, potass, nitric acid, the actual cautery, &c. . . . All these have inconveniences which I need not point out to you, inasmuch as I have to propose to you a new agent particularly efficacious. This caustic consists of sulphuric acid, mixed with powdered vegetable charcoal in the proportions necessary to form a half-solid paste.*

This paste applied to the chancres dries quickly and forms a kind of black crust which remains adherent to the tissues, combines with them, and is not detached until after the

* It is a caustic analogous to the saffro-sulphuric caustic of M. Velpeau. The powdered charcoal only takes the place of the saffron.

lapse of several days, when the chancre will be found converted into a simple wound, or, sometimes, even already cicatrized.

Without doubt, the application of the carbo-sulphuric caustic causes severe pain; but the pain which it provokes is much less excruciating then that produced by nitric acid or the actual cautery; it is also less persistant than that which attends the application of the Vienna paste. It is a penetrating caustic, which alters altogether the tissues with which it comes into contact, and which, like the chancre, exerts its destructive influence at the periphery. It is, therefore, the best agent that can be employed to destroy the specific ulcer.

It is wonderful, gentlemen, to see the result produced by the careful application of this caustic. The chancre, if I may use the expression, is killed upon the spot, and that which succeeds to it is a simple wound, free from virulence, free from specificity,—a common ulceration, which, deprived of the source of its maintenance, proceeds rapidly towards cicatrization.

Cauterization, gentlemen, is a splendid means of curing the chancre. It is, moreover, in a social point of view, the most powerful prophylactic, because, by destroying surely and promptly contagious affections, it extinguishes the nuclei of infection.*

But remember this fact,—that in order to obtain from the means which you adopt that which you have a right to expect, the caustic must not be sparingly employed. I again warn you against a slight, superficial cauterization, which only destroys the surface of the chancre, instead of acting upon the deeper parts.

I shall not remind you here of the odium and aversion which have existed against cauterization. We have done

* Lettres sur la Syphilis.

with that, I should hope; with the doctrine "of the wolf shut up in the sheepfold."

It is quite time that the advocates of these errors should cease to endeavour to make us believe in the benefits resulting from these singular therapeutics, which allow the chancres to progress at leisure, from dread of eradicating too soon these foci of virulence, which, they imagine, serve as useful and salutary emunctories for the infected organism.

I, on the contrary, adopt the destructive method; and strongly advise the *destruction of the chancre as soon as possible;* to destroy it in its form as a local affection, and so prevent its propagation, its extension, its influence upon the glands, and constitutional infection, if in the case of the infecting chancre it be done sufficiently early.

This, gentlemen, is the chief point in relation to the therapeutics of chancre.* Allow me now to say a few words concerning the general treatment of this affection.†

Let us imagine the cauterization to have failed, or rather that the patient has refused to submit to its application. The chancre therefore exists, and how is it to be treated?

We can exert very little influence upon the progress and duration of the chancre, so long as its virulent specificity remains; that is to say, if we do not employ caustics.

The most simple hygienic means afford as good, if not better results than the different topical medicaments, which multiply and encumber the arsenal of therapeutics. Also, in all cases in which the chancre has not a tendency to

* The chancre may also be removed by excision; but this method can only be had recourse to when the disease is seated upon useless or deformed organs, as, for example, when it occupies the nymphæ unusually elongated, or the margin of a long prepuce. It must also be performed at some distance from the chancre, so as to avoid the possibility of cutting into tissues already affected by the poison.—R.

† Before excising a chancre, it may be advisable to destroy its surface with a caustic, in order to avoid the risk of inoculating the new wound with the pus of the original ulcer.—C. F. M.

increase, I recommend frequent ablutions with an emollient or slightly astringent lotion, followed by the application of dry charpie, which not only absorbs the virulent pus, but also should be arranged so as to separate the diseased from the healthy tissues. If the suppuration is abundant, and if the chancre extends itself, I have recourse to the aromatic wine (*vin aromatique*). It is one of the best topical applications which can be employed to diminish secretion,* neutralise virulence, and harden in some way or other the parts adjacent to the ulceration.†

The tincture of iodine diluted, the decoction of tan, chlorinated water, &c., are good detersives; but they only modify, instead of acting specifically,

Not so the potassio-tartrate of iron. It certainly acts almost specifically upon the spreading chancre. It is assuredly the *opponent of phagedænism*. It combats it, almost always moderates it, and most generally arrests its progress. I have treated successfully the greater number of phagedænic chancres which have come under my observation by the simple application of a solution of potassio-tartrate of iron; and the internal administration of the same.‡ There

* I find the application of a lotion, consisting of one drachm of the tincture of the sesquichloride of iron to an ounce of water, quite as efficacious as the aromatic wine, which latter cannot be readily procured, inasmuch as it is a compound vinous tincture of about twenty different herbs.—C. F. M.

† The patient should wash the ulceration with the aromatic wine, and dress it with the same, three or four times daily. Should the ulcer be either irritable or painful, the extract of opium, in the proportion of ten grains to the ounce of the wine, may be added; and solid opium be administered internally. Exuberant granulations may be checked by the application of the nitrate of silver.—A. FOURNIER.

‡ The following is my ordinary formula:—

Take of distilled water . . . . 8 ounces
Of potassio-tartrate of iron . . 1 ounce. Mix.

The patient to take one ounce of the mixture thrice daily, and to dress the ulceration twice a day with the same liquid.

I do not speak here of cauterization. It is the preventive means, *par excellence*, against phagedænism. It is also an excellent means of cure.

is nothing more curious, without doubt, than the influence exercised by one disease upon another; and nothing more remarkable when this influence exerts a therapeutic action.

I have twice seen *enormous* phagedænic chancres, which have resisted all our endeavours, modified and cured by an attack of erysipelas. So that I consider erysipelas, if not as a specific, at least as an agent inimical to phagedænism. Again, this salutary influence is not exercised exclusively against phagedæna attending syphilitic ulcerations. Dermatologists have long since pointed out the remarkable modifications which the natural or provoked development of erysipelas effects in certain chronic affections of the skin, especially in the case of lupus.*

Before finishing my observations upon the general therapeutics of chancre, let me draw your attention to the fact, that no applications are more injurious to the chancre than fatty matters, especially those containing mercury. Daily observation protests, then, against the opinion of the ancients, of Hunter especially,† and of many others, who accord to mercury a veritable specificity against all syphilitic ulcerations. As regards the variety of the affection under consideration, the disastrous influence which this pretended specific exercises over it has only been too often witnessed.

The peculiar seat of a chancre will occasionally modify the treatment.

When the specific ulceration occupies the urethra, or some other region more or less secluded, more or less deep, the preceding methods become evidently inapplicable, and it is necessary to have recourse to somewhat different means.

Let us first consider the urethral chancre, that famous hidden chancre (chancre larvé), which, in old times, gave rise to so much disputation.

If the ulceration is seated at the entrance of the canal,

* See note IX. † Hunter on Chancre.

upon the lips of the meatus, the ordinary treatment is still applicable, taking the precaution to maintain the lips separate by the introduction of a piece of lint.

But what is to be done when the ulceration is more deeply seated in the urethra? If the presence of the chancre in the urethra has provoked a violent inflammation of the canal, the treatment must be antiphlogistic. Prescribe local blood-letting (fifteen to twenty leeches to the perinæum or mons veneris), warm fomentations, abundant drinks, &c. But erections are most to be dreaded, which, by stretching the diseased surface, may give rise to fissures, and thus favour the extension of the ulceration. It is in diminishing the congestion of the parts by antiphlogistic treatment that you will prevent this dangerous complication; for in the medicaments called anaphrodisiae (camphor, belladonna, digitalis, hop, &c.) I have very little confidence, and, indeed, have often proved their inefficiency.

But, as soon as the urethral inflammation is arrested, cause the patient, at first, to inject into the canal, twice or thrice daily, a mixture composed of equal parts of the aromatic wine and decoction of poppies, then only the wine if it does not produce irritation.*

Since the invention and abuse of the speculum, chancres situated in the vagina and upon the neck of the uterus may be classed amongst those seated upon the *exterior* parts of the body, and may be similarly treated. You are thus able, and with equal success, to cauterize with the carbo-sulphuric paste the specific ulcerations of the os uteri and of the vagina, as you would do a chancre of the labia or glans penis.

Chancres of the anus and of the lower part of the rectum require, above all, great cleanliness and frequent dressing.

* I do not advise cauterization by the aid of Lallemand's instrument; the practice is dangerous, in consequence of the inflammation to which it gives rise, and does not even effect that for which it is intended, namely, the extinction of the chancre as far as regards its virulent properties.

One special indication is evident in this case; it is, to soften the intestinal matters by the aid of injections, so as to allow them to pass without injuring the diseased parts. The dressings may be applied on lint introduced into the rectum, or if this cannot be retained, simple injections must suffice.

But let us leave these special indications, and return to the subject previously under consideration.

I have not yet spoken of *general* treatment; that is, because, for a purely local affection like the simple chancre, *local treatment* is alone requisite. You are aware that this variety of chancre exercises no influence upon the economy,—that it is followed by no constitutional affection,—in a word, does not create a diathesis, does not *infect* the system. Where then would be the utility of a treatment adopted against an infection which can never be developed?

Without doubt, you will often meet with patients whose state of health may be benefited by well-directed treatment, whether it have a tonic or antiphlogistic tendency. I only wish to insist that there is nothing special in the affection itself requiring antidiathesic treatment.

Not only, gentlemen, is the specific treatment of syphilis in this instance useless, but, on the contrary, it may be injurious. When I define the rules to be observed in the mercurial treatment, I shall show whether it is a *matter of indifference, or not, to prescribe it at hazard.* But I reserve this question, and for the moment limit myself to stating this fact,—that the administration of mercury during the existence of a simple chancre is incontestably one of the conditions the most apt to favour the development of phagedænism. I repeat, the greater part of the horrible spreading ulcers which are seen in this hospital, after having destroyed a part of the penis, are simple chancres upon which mercury in all its forms has been lavished. Judge, then, of the utility of a mode of treatment which risks the loss of a

part of the penis, in order to cure the syphilis which does not exist.

The simple chancre being, as I have just remarked, a local affection, without diathesic influence and constitutional manifestations, you can understand, gentlemen, what success is likely to follow the use of medicaments called "*depuratives*," destined to "*purify the vitiated blood*," and to prevent the syphilitic storm. Here the charlatans triumph over us; they effect *radical* cures indeed, and they do not deceive their patients in promising them a complete immunity for the future.

I speak of charlatans; but how many practitioners adopt in good faith the mercurial treatment for the simple non-infecting chancre. How many honest and upright individuals believe that they have cured syphilis, which, in reality, never existed.

X.

OF THE ORIGIN OF CHANCRE IN GENERAL—ANCIENT DOCTRINE—SOURCE OF THE SIMPLE CHANCRE—NEW RESEARCHES.

Having drawn your attention to the symptoms and therapeutics of simple chancre, I will now make a few remarks respecting its origin.

Formerly all the varieties of chancre were considered as one and the same. The chancre, as I have observed, was a single *grain*, which gave rise to different germs, according to the qualities of the soil in which it was called upon to develope itself. Thus, it was believed, that the pus from the same chancre, infecting several individuals, could produce in one a simple chancre, not followed by constitutional infection, and in another could give birth to a chancre of the infecting variety, the origin and prelude of syphilis.

This difference in the action of the poison was explained by a kind of unequal *predisposition* of individuals to contract

syphilis, depending upon their peculiar conditions of age, of sex, of temperament, of health, &c.

It is not long since these doctrines were accepted without dispute, and enjoyed full credit.

At the present day, gentlemen, science appears to have made a step in advance, and the separation of chancres into two distinct nosological kinds appears destined to throw a new light upon the problem hitherto unsolved.

The chief differences of form and nature, which no one can refuse to recognise, between the two varieties of chancre, have led persons to think that there existed for each of these a particular source, and a special virus. From that time attention was directed to a new subject of study—"*The origin of chancre.*" The nature of the grain was compared with that of the fruit; that is to say, the original affection was compared with the transmitted affection. The genealogy of the chancre was interrogated, in order to discover if a certain form was transmitted after its kind, or if the two kinds could be mingled during their propagation.

What, then, is the *origin* of the simple chancre? Does it derive its source from a chancre of the same nature, or does it spring from another variety?

Many facts will serve us for the solution of this problem.

Firstly, what is the result of artificial inoculation effected by pus taken from a simple chancre upon the subject from whom the pus is borrowed? The answer to this question is not of a doubtful nature.

The chancre of inoculation is always the analogue of the chancre which has produced it; at whatever epoch or whatever region the inoculation has been practised,* it is always a simple chancre which is developed; a chancre with a soft base, altogether free from specific induration; a chancre which never exercises upon the glands the influence peculiar

* The cephalic regions excepted, because, as yet, inoculation has not been attempted upon them.

to the other variety of primitive ulceration, and never becoming the exordium of a diathesis. Without doubt, this first fact, which proves the analogy between the forms of these two chancres, might be objected to, on the ground that they were developed upon the same individual; and were, consequently, under similar influences of soil, of temperament, of constitution, of health, &c. . . . But these objections fall before the following facts.

Syphilisators have not hesitated to convey to healthy individuals pus borrowed from a foreign source. Their rash experiments would have, at least, been of use in a scientific point of view, to solve the problem in question, if they had endeavoured to establish some relation between the chancres from which they borrowed the pus and those which they produced by inoculation. But it is clear that this delicate relation could not be detected by those who commenced their researches by confounding the two varieties of chancre. For my part, this is what I have saved from the shipwreck of syphilisation. It is that, in the numerous cases in which I have seen the pus of a simple chancre transmitted to a healthy individual, inoculation has invariably produced a simple chancre.*

* During my residence at the Midi, a young medical man, who had never been attainted by syphilis, allowed me to practise upon him publicly two inoculations with the pus of a simple chancre. The pus which served in the first inoculation was taken from an individual with three simple chancres. This patient took the contagion from a woman whom I had the opportunity of visiting, and upon whom I found a simple chancre. This woman, moreover, had communicated chancres of the same nature to a second patient. The artificial inoculation gave birth to a simple chancre.

The pus for the second inoculation was borrowed from a patient, the subject of a simple chancre of the frænum. The woman from whom this patient received the contagion presented a simple chancre of the labium and an acute bubo, which soon suppurated. She had also transmitted the contagion to a second individual, who was treated in the hospital for simple chancres, complicated by a double suppurating inguinal bubo. This second inoculation furnished, like the first, a simple chancre.

(I should add, that the two patients from whom the pus for inoculation was obtained had never been previously affected by syphilis.)—A. Fournier.

But on the failure of inoculation by the lancet, let us interrogate the effects of physiological inoculation.

Persons have been lately occupied in comparing the results of contagion upon subjects mutually infected, that is to say, in following the genealogy of chancre, by tracing the transmitted symptom to its origin.

You readily understand, gentlemen, how many difficulties and causes of error such researches encounter; indications, doubtful or erroneous; false assertions; the mistakes of certain patients, who have perfect confidence in one woman, and accuse another merely on suspicion; plurality of intercourse at the time the infection is produced; the development of the chancre upon an old cicatrix; double contagion; previous infection, either denied or unknown, &c. Consequently, observations of this nature must be made with the greatest caution and scrutinizing investigation.

For my part, in every instance which I can recall to mind, in which I have been able to trace the source of a simple chancre, I have always found upon the subject who had transmitted the contagion an affection of the same form and of the same nature.

M. Bassereau has experienced similar results. "If," says he, "patients affected with chancres, and who are free from constitutional symptoms, are confronted with those who have infected them, or whom they have infected, one sees them, without exception, to be equally affected with chancres which limit their action to the spot first contaminated.* This observation is important, but only refers here to the contagion of the infecting chancre. One of my pupils, a distinguished syphilograph, M. Clerc, has arrived at similar conclusions, in a recent memoir upon the subject.†

* Bassereau, Traité des Affections de la Peau symptomatiques de la Syphilis, page 197.

† Du Chancroïde Syphilitique, Mémoire lu à la Société des Sciences Médicales de Paris, le 27 Octobre, 1854.

Lately, also, two *internes* of Paris have made similar observations upon an extensive scale.*

Thirty-nine times, in the case of patients affected with simple chancres, MM. A. Fournier and Caby have been able to trace the source of the contagion, and thirty-nine times have they found the original affection absolutely similar, in form and in nature, to the transmitted affection.

Often, indeed, chance has happily brought to the hospital a certain number of patients who had contracted the infection from the same source; and in these cases they have invariably established, and I also with them—1st, a perfect analogy between the chancres upon the different individuals affected; 2ndly, a complete identity of these different chancres with the original one.

The following observations refer to patients whom you have had the opportunity of examining in my wards, and to whom I have often directed your attention.

OBSERVATION I.—DOUBLE CONTAGION.

Case I.—J. C—— (Paul), aged 28 years. Constitution robust; no previous venereal taint. This man lived during six weeks with a girl, F——, without having intercourse with any other woman, when, on the 16th of January, he observed several small ulcerations seated upon the prepuce and root of the glans penis. On examination, I found *four simple chancres*, with perfectly soft bases, and no glandular affection.

Treatment:—To dress the ulcers thrice daily with charpie and aromatic wine.

The patient followed my directions very irregularly, and towards the end of February the chancres still persisted. At the beginning of March an acute bubo in the left groin manifested itself, and he then entered the hospital under M. Ricord. When in the hospital, the chancres healed in a few days. The bubo was opened on the 21st of March. No internal treatment was employed. I saw C—— in September following, quite free from syphilis.

Case II.—In January, 1856, P—— (Jacques), aged 34 years, entered the hospital. P—— had had intercourse with the same girl, F——, in the first week in January. No other intercourse during seven weeks previously. On the 19th of January this patient had three *simple chancres*,

* See note X.

with soft base, seated upon the prepuce; an *acute bubo*, suppurating; gonorrhœa. Chancres dressed with glycerine, cubebs. No constitutional symptoms.

Case III.—On 24th of January, the girl F—— entered the hospital (Saint Lazare). First venereal taint.

At this period I found *a simple chancre*, with soft base, upon the left labium, a similar chancre at the anus, an *acute bubo* in the left groin; an intense vaginitis. The bubo suppurated. No consecutive constitutional infection.

Two individuals have connexion, at an interval of some days, with the same woman.

OBSERVATION II.—DOUBLE CONTAGION.

Case I.—J——, prostitute, aged eighteen years, of lymphatic temperament, moderately healthy. Entered St. Lazare on 17th September. This girl was the subject, twelve months ago, of a granular affection of the os uteri, for which she was treated in the hospital. Since that period no accident of any kind. Actual state on 17th of September:—*soft chancre*, with base perfectly soft; floor fretted, worm-eaten; seated upon the folds at the entrance of the vagina. Superficial ulceration of the posterior lip of the neck of the uterus. Treatment: cauterization; injections of alum.

September 30th. Appearance of a new simple chancre on the perinæum (accidental inoculation): cauterization.

October 6th. Chancres are healing. Base very supple, absolutely free from induration.

October 13th. Cured. Left the hospital on 25th. Seen again in December. No constitutional infection.

Case II.—C—— (Jules), aged nineteen years, lymphatic temperament; enters the hospital on October 7th. Had gonorrhœa in 1854; cured by copaiba. Since that period, no venereal accident. C—— lived with the girl J—— during two months, without having intercourse with another woman, when, on September 16th, he observed several small *pimples* on the prepuce. These were soon followed by ulcerations, which spread.

Actual state on October 7th. Three *simple chancres*, with soft base, seated upon the mucous surface of the prepuce. No glandular affection, no other symptom. Treatment:—emollient lotions, dry charpie. Inoculation practised upon the arm with the pus from one of the chancres, produced a *simple chancre*, with soft base. Cauterization.

Sept. 10th. Two new ulcerations upon the prepuce (inoculation of neighbouring parts).

Oct. 13th. Chancres are healing.

Oct. 24th. The patient showed me a large ulceration upon the index finger, resembling a chancre. He lately cut his finger, and dressed the ulcer, as usual, without taking the precaution to protect the injury. The base was not indurated. No glandular affection.

Dressed with aromatic wine.

Nov. 2nd. The digital chancre is healing.

Nov. 14th. The chancres are healed. The patient leaves the hospital.

Seen in January, 1857. No constitutional infection.

Case III.—L——, nineteen years of age; sanguineous temperament; robust constitution; first venereal affection. Last intercourse on September 15th, with the girl J——. No connexion at least three weeks previously.

Chancre recognised by the patient on the 18th of September.

Treated with various ointments.

Oct. 3rd. Actual state: One *simple chancre*, with soft base, seated upon the inner surface of the prepuce. No glandular affection. Cauterization with the carbo-sulphuric paste. Rapid cure; no consecutive symptoms.

Third fact still more demonstrative.

OBSERVATION III.—TRIPLE CONTAGION.

C——, prostitute, enters St. Lazare, 1st of August; twenty-five years of age; negress. Constitution robust. First venereal affection.

Actual state: Large *chancre of the anus, with soft base*, occupying, in great part, a hæmorrhoidal tumour, and extending somewhat upon the median line of the perinæum. Vulva healthy; vagina and neck of the uterus healthy. Glands in the inguinal regions normal. This woman traced the commencement of this affection to an intercourse three months previous. She experienced no pain, and had submitted to no treatment. Ligature of the hæmorrhoid. Deep cauterization of the part of the ulceration which borders the tumour.

3rd. The tumour has come away, leaving a large ulceration, which is cauterized with the nitrate of silver.

This wound, in the course of a few days, takes on a chancrous aspect. Cauterization repeated. Calomel ointment applied.

15th. The chancre is healing.

21st. Cicatrization complete. Left the hospital on September 1st. No consecutive symptoms. This woman had intercourse, in the course of the first week in May, with three individuals, who came to the hospital almost simultaneously.

Case I.—R——, aged eighteen; constitution robust. Had gonorrhœa five months ago, which was cured in six weeks.

Intercourse with the girl C——, dating from 1st of May. Previous connexion four months before. No consecutive intercourse. Chancres recognised on 6th of May.

No treatment.

Actual state, 16th of May: *Soft chancre*, of the œthymatous form, seated upon the cutaneous surface of the prepuce, on the left side. *Acute adenite* of the left groin. Cauterization. Fifteen leeches to the groin.

3rd June. Bubo opened. Glandular chancre. Cauterization with the carbo-sulphuric paste.

20th June. Falling of the scab, leaving a simple wound, without specificity.

July 1st. Cured. This patient was seen in December; no consecutive symptoms.

Case II.—C——, aged thirty-two years, of sanguineous temperament. Chancres, in 1850, treated by M. Puche for simple chancres. Treatment, anti-mercurial; no consecutive symptoms. Gonorrhœa, with epididymitis, in the course of the same year. Last intercourse, dating from the first days in May, with the girl C—— Previous intercourse, four months and a half before.

Actual state on 20th of May: *Simple chancre*, with soft base, seated upon the left side of the meatus urinarius. *Acute adenite* in the left groin.

Treatment:—Cauterization. Fifteen leeches to the groin.

June 1st. Bubo opened.

June 5th. Cicatrization of chancre.

June 17th. Cured.

Seen in November; no consecutive symptoms.

Case III.—B——, aged twenty-five years; constitution, moderately good; temperament, lymphatic. Has had two attacks of gonorrhœa, the last in 1854; no consecutive symptoms. Last intercourse, on May 2nd, with the girl C——; previous connexion, twenty-five days before. Chancre recognised on May 4th, and treated with an opiate ointment. Bubo dating from the last days of the same month. On June 7, M. Puche proves the existence of a *simple chancre*, seated upon the corona, and an *acute adenite* in the right groin, about to suppurate.

Treatment:—Chlorinated lotions for the chancre, cotton wool; very many punctures to the bubo, cataplasms.

17th. Cicatrization of the chancre. Bubo cured towards the end of June. No consecutive symptoms.

OBSERVATION IV.—QUADRUPLE CONTAGION.

The girl C—— communicated chancres to four individuals in the last week of December, 1855. We were unable to find this woman, but will state the condition of the four individuals.

Case I.—P——, aged twenty-three years, of lymphatic temperament; entered the hospital on 15th of January, 1856, under the care of M. Ricord.

History:—Three previous attacks of gonorrhœa; the last, contracted six months ago, has become chronic. *Indurated chancre*, in October, 1855, with double bubo, hard and indolent. No treatment. Chancre cicatrized after some weeks. In the beginning of December, appearance of a syphilitic papular eruption, headache, enlargement of posterior cervical glands (adénopathie cervicale postérieure). After the healing of this chancre, P—— lived with the girl C—— without having intercourse with any other woman; when, towards the 21st of December, several chancres appeared upon the prepuce. No treatment.

Actual state on January 15th: Three *simple chancres*, with soft base, seated upon the margin of the prepuce; two *simple chancres*, with soft base, upon the corona; a *simple chancre* of the frænum. Gonorrhœa. Roseolar eruption on the decline. Scabby eruption of the scalp. Posterior bi-cervical adenopathy. Headache. Adenopathy, bi-inguinal, hard and indolent.

Treatment:—Chancres dressed with the aromatic wine. One grain of the proto-iodide of mercury daily; bitter infusion; cubebs.

Feb. 1st. The chancres persist. *Acute adenite* of the left groin. Leeches; cataplasms.

9th. Suppuration and opening of bubo. In the course of a few days, the wound resulting from the opening becomes chancrous and extended. Undermining of the skin. Veritable *glandular chancre.*

Dressed with a solution of potassio-tartrate of iron. Continue mercurial treatment (two grains daily). Cicatrization of the chancres towards the end of February. Bubo healing slowly; cicatrized in the course of May. The constitutional symptoms resulting from an infection anterior to these last chancres developed themselves with remarkable intensity: thus, in January, condylomata about the anus; in February and March, squamous eruption; in June, ecthymatous eruption, psoriasis over the trunk, aphthæ on the tonsils; in July, relapse of the ecthyma; confluent aphthæ of the lips, of the tongue and throat; in November, syphilitic iritis.

Case II.—N——, aged twenty-two years. Scrofulous subject.

History:—Indurated chancre in 1855, with bubo, hard and indolent, treated by M. Ricord; followed, after an interval of some months, by syphilitic eethyma. Since that epoch, no venereal accident. Intercourse with the girl C—— on 29th of December, 1855. Previous connexion four weeks before. Chancres observed by the patient towards January 2nd, 1856.

Actual state on January 15th: Several small chancres, with soft base, on the frænum, the prepuce, and glans.

Acute adenite in the left groin; on the right side, some glands, hard and indolent. Brownish maculæ upon the inferior extremities and upon the trunk; vestiges of the old ecthymatous affection. Posterior cervical adenopathy.

Treatment:—Aromatic wine, cataplasms.

January 19th. Bubo was opened.

February 5th. Chancres are healing.

,, 12th. Cicatrization of chancre.

,, 18th, Bubo healed.

No other constitutional affection up to the day of leaving the hospital.

Case III.—L——, aged twenty years, of lymphatic temperament.

Gonorrhœa in 1855, treated by copaiba: cured in two months. No consecutive symptoms. Intercourse with the girl C—— on December 31st. Previous intercourse at the end of November. Chancres observed on January 4th.

Actual state on January 10th: Two *simple chancres*, with soft base; one

seated upon the margin of the prepuce, the other upon the corona. No glandular affection.

Treatment :—Aromatic wine. Chancres healed by the end of February. No constitutional affection.

This patient was under observation until August, 1856, and had not shown any constitutional symptoms.

Case IV.—C——, aged twenty years. Constitution very robust. Sanguineous temperament. No antecedent venereal affection. Intercourse on December 29th, 1855, with the girl C——. Previous connexion, four months before. Chancres observed on January 2nd.

Actual state on January 7th: *Simple chancres*, with soft base, on the prepuce and frænum. No glandular affection. Treatment :—aromatic wine.

Chancres healed towards the end of January. No consecutive symptoms.—A. F.—E. C.

Allow me to call your attention to the fact of the development of the same variety of chancre upon several individuals whose condition differed, inasmuch as two of them were under the influence of a previous syphilitic taint.

The woman C—— has intercourse in the last week in December, 1855, with four individuals.

Of these four persons, two were under the influence, at this time, of a *syphilitic diathesis*, contracted some months previously; the third had only been subject to *gonorrhœa;* the fourth had *never been subject to any venereal affection.*

Now these four persons contract, at the same time, chancres of an *exactly similar nature*,—simple chancres, without indurated base.

The two first were subjected to inguinal buboes which suppurated; the constitutional symptoms following a previous infection pursue their usual course. The two last are subjected to no constitutional symptoms.

In terminating my lectures on the simple chancre, I make this proposition :—"*The simple chancre appears to spring from a simple chancre, and to propagate itself solely after its own kind.*"

I shall now proceed to consider the *infecting* or *indurated* chancre.

PART III.

THE INFECTING CHANCRE, THE INDURATED CHANCRE.

Gentlemen,—With the *indurated chancre,* we enter to-day the domain of syphilis.

The special character of the kind of chancre which we are about to study is not only the induration by which it is accompanied, but, above all, the general influence it exercises on the system, its effects upon the organism, and the diathesis which it establishes.

We now commence the history of a *constitutional affection.*

I.

MAN ALONE IS SUBJECT TO SYPHILIS; ANIMALS ARE UNAFFECTED BY IT—OF THE INFECTING CHANCRE—QUESTION OF SEAT—DEVELOPMENT—INDOLENT CHARACTER—PRIMITIVE FORMS—ASPECT OF THE ULCERATION—COMPARISON, DE VISU, BETWEEN THE TWO VARIETIES OF CHANCRE.

The general description of chancre which I gave you at the commencement of these Lectures will have made you, in great measure, acquainted with the indurated chancre. I shall only have, therefore, to insist upon those points of its history which present a special character.

You already know that it is a variety of chancre to which *man alone is subject.* If the transmission of the simple chancre to animals might have raised a doubt, here all uncertainty ceases. It is an established fact, that notwithstanding the numerous attempts that have been made to inoculate animals with the *infecting* chancre, none as yet

have produced the specific pustule, nor given origin to a well-defined and uncontested case of syphilis. I therefore repeat, with all syphilographs of the past, I proclaim, with my two learned colleagues, MM. Puche and Cullerier, that animals are unaffected by the syphilitic poison, and that it is not transmissible unto them; so that this disease is the sole property of man, and unshared by the lower animals.

I further told you that the indurated chancre might manifest itself on any part of the body, from head to foot; whereas, in speaking of the simple chancre, I was obliged to make certain restrictions, and to define the limits within which it might appear: here, on the contrary, neither limits nor restrictions are required. The infecting chancre may develope itself everywhere,—on the extremities, the trunk, the neck, and even the *head* itself—a region inaccessible to the simple chancre. No region is exempt from it; it takes root in any soil.*

Mucous membranes are affected by it, as well as the skin. You all know how frequently it is met with at the vulva, upon the glans penis, on the mucous lining of the prepuce, &c. I have met with it on the lips, on the tongue, on the conjunctiva, on the pituitary membrane, on the neck of the uterus, in the vagina, at the anus, in the rectum, &c. &c. Perhaps the mucous membrane of the intestinal canal, below the pharynx and above the rectum, is equally apt to be affected by it; but, as far as I am aware, no attempts have as yet been made at direct inoculation by laying bare any part of the intestinal mucous membrane. At all events, all the attempts which have, up till now, been made to produce inoculation on the stomach by the administration of pills containing syphilitic pus have proved fruitless.

You will, however, easily perceive that such experiments

* See Note V.

were far from fulfilling the conditions necessary for contagion.

But I hasten to describe the development of the indurated chancre, and to define its characters.

The chancre which becomes indurated, or, in other words, the infecting chancre, generally develops itself in a *slow and insidious manner*. A certain time is necessary in order that the inoculating pus may, so to say, *prepare the ground* for its development. Here we might admit a true incubation, if we were to place confidence in the opinion of patients; but direct experiment has proved beyond a doubt that this incubation does not exist, in the true sense of the word. The phenomena which follow the insertion of the virus are almost immediate; only the first symptoms are slight, and easily overlooked by an inexperienced person. Also, the veritable début of the indurated chancre is generally altogether unobserved by patients. This supposed period of incubation, which separates the moment of contagion from the epoch at which it is first perceived, is, therefore, a period of *inobservation*. Add to this, that the infecting chancre is an ulceration *essentially indolent* in its development. It most frequently commences, extends itself, acquires depth, and establishes itself, without causing the least sensation of pain. Thus, patients who generally judge of the serious nature of a disease by the pain it produces, regard this ulceration as an insignificant excoriation or "écorchure," to which they attach no importance. It often happens that, with careless patients, it passes entirely unperceived; and we are often consulted by patients having large indurated chancres, the *existence* of which they never even suspected.*

* We frequently find upon the person of patients who consult us for secondary symptoms, large indurated scars, or ulcerations, still persisting, which without us would have passed entirely unperceived. If you had not been frequent eye-witnesses of such cases, I should most likely bring a smile upon your lips when I tell you that individuals often innocently

If such is the case in men, judge whether the chancre in general, and in particular the infecting chancre, does not run the risk of being unperceived or unheeded in women! And what must we think of the doctrines of those practitioners who deny that chancre is the necessary exordium of syphilis, only because patients do not declare its presence in *all* cases? The forms which an indurated chancre assumes at its début are similar to those of simple chancre. At one time a pustule precedes the ulceration, at another time the latter establishes itself at once. Whether prior or consecutive to the pustule, the ulceration generally is of a rounded form,—a form peculiar to the primary venereal ulcer, and already described in speaking of simple chancre.

Its appearance, however, to an experienced eye, differs essentially from that of the preceding. Thus, the surface of the ulcer is smoother and less worm-eaten than that of the simple chancre, which, as you know, generally presents an irregular, fretted, and, as it were, areolar floor. During its progress, the ulceration becomes grey and lardaceous, but always preserving its smooth surface, sometimes even glistening and variously coloured. Its edges are generally smooth and shining, as if varnished, whilst the centre is of a darker and uniform grey tint.

There is another distinguishing character, to which I beg to call your attention. The soft chancre is, as it were, struck out by a punch; the indurated chancre is made, as it were, with a gouge: the borders of the former are abrupt and perpendicular; those of the latter are gradually lost in the floor of the ulceration, giving to the ulcer the form of a cupola.

The edges of the soft chancre are often undermined, whereas those of the hard chancre are adherent. These characters, belonging to the aspect and form of the ulceration,

declare that they had never perceived upon themselves ulcerations of the size of a shilling.—R.

are of great value, and essentially practical. When well defined, they give to the various kinds of ulcer a physiognomy which, in the absence of all other characters, would suffice for diagnosis..

II.

SPECIFIC INDURATION—ITS CHARACTER—DEPTH OF INDURATION—INDURATION *EN SURFACE*, OR PARCHEMINÉE — CHARACTER — PERIOD AT WHICH IT FIRST APPEARS — PRETENDED SLOW INDURATIONS — THE DIFFERENT CHARACTERS OF INDURATION ACCORDING TO REGIONS — INDURATION IN WOMEN—A HERESY—REFUTATION.

I now arrive at one of the most important points in the history of chancre ; I mean, its induration. The base of an ulcer which is to infect the system presents a peculiar character, which you will not meet with in any other kind of ulcer, whether syphilitic or not; this character, which has already been alluded to, is induration. This induration is circumscribed at the circumference of the chancre, and extends beyond it more or less ;—it plunges deeply into the subjacent tissues in the form of a semisphere, the surface of a section of which would be represented by the external ulceration. It surrounds the ulcer on all sides, being at the same time both *below and around it*. It forms for it a kind of bed, surrounding, at the same time, its margin in such a manner as to be on all sides the means of uniting it to the adjacent healthy parts. Sometimes it raises the ulcer above the level of the neighbouring tissues, thus constituting a variety of the *ulcus elevatum*. This induration is, I repeat, *exactly and abruptly circumscribed* at the circumference of the base of the chancre, as Hunter has observed ;* it does not affect the adjacent tissues, which retain their habitual suppleness, unless they become the seat of inflammatory complications.

* A local thickening is formed, which at first, and as long as it is of a truly venereal character, is very circumscribed ; not gradually and insen-

It originates "à froid," without any inflammatory radiation; so that the nucleus which it forms may be regarded as a foreign body deposited under the skin, and enchased amongst healthy tissues. The induration, which subtends the base, surpasses the circumference of the contagious chancre; possesses an entirely special character, peculiar to it, and constituting a true *pathognomonic* symptom. Thus, this induration, as I have already frequently repeated, produces to the touch a sensation *sui generis*, which *cannot be mistaken for any other* when once it has been experienced. It is the sensation of an elastic, hardened, and cartilaginous tissue; a sensation which by no means resembles that of the indurated œdema of inflammations, or the tissue of scars. It was therefore a mistake to deny its special character, as well as to confound the words "*induration* and *hardness*;" words that are synonymous, no doubt, in ordinary language, but to which the poverty of our descriptive language has forced me to give a different signification, and which I employ in a conventional manner, to express things differing entirely from one another. No; once and for all, the cartilaginous, hardened, and elastic induration of indurated chancre is not the *dull* induration of inflamed tissues or of scars. There is no similarity but in the words; the things themselves, as well as the sensations which they express, differ totally from one another. It truly requires all the ill-will of a systematic opposition not to accept at once these distinctions, and obstinately to confound what the mind refuses to assimilate. Bell had compared this induration to one-half of a pea situated under the ulceration. This is, in fact, its usual form, especially when it is developed in homogeneous tissues. But this classical form presents several varieties. In the first place, if the tissues invaded by the chancre give way unequally in

sibly losing itself in the surrounding parts, but terminating abruptly. (Hunter, translated by Richelot, on the Chancre, ch. i.)

the various parts of its circumference, the plastic infiltration which constitutes the induration will be formed irregularly; in such cases it assumes different forms, becoming elliptic, anfractuous, raising the chancre unequally in different points of its surface, &c. These varieties of form owe their origin to the locality in which the induration is seated. At times, the induration, well defined on the edges of the ulcer, is almost entirely wanting in the central part, thus forming a kind of ring. In other instances, instead of sinking into, and implanting itself, so to say, in the tissues, it remains superficial, without advancing any further. So that if you were to seize between your fingers a chancre presenting this form of induration, you would no longer perceive the semisphere of which I spoke to you, nor the half pea of Bell. It consists of nothing but an induration "*en surface,*" which might well be compared to a *sheet of parchment* placed under the floor of the chancre; in fact, if you compress the base, you experience a sensation exactly similar to that which a piece of parchment produces when gently pressed between the fingers by its opposite edges. I have, therefore, given to this form the name of "*induration parcheminée.*" This variety of superficial induration can only be detected by skilful and experienced fingers. It is requisite to *know how to touch and feel,* before one can perceive it; where to *search,* before one can discover it. But you are, no doubt, anxious to be made acquainted with the *intimate nature* of *induration,* and expecting that I should unravel the mystery. What is, therefore, this indurated base which supports the infecting chancre? What organic influence produces it? By what anatomical elements is it constituted? The seat, gentlemen, of this induration is in the thickness of the skin and mucous membrane, as well as in the cellular tissue lining these membranes. It seems to have a preference for the lymphatic system, and is generally supposed to be formed by the effusion of plastic lymph into the absorbing vessels, with suffu-

sion into the adjacent cellular tissue; it is a kind of capillary lymphangitis with peripherieal *defluxion*. It is remarkable, indeed, that induration is most perfect in those regions in which the lymphatie system is most developed, and in which its vessels are most numerous. Bear in mind also, that it is by means of the lymphaties that it extends and propagates itself; the lymphatic vessels eonveying it, so to say, into the glands. Neither the microscope, nor dissections, nor chemieal analyses have been able to diselose the intimate nature of induration. All that we know up till now is, that indurated tissues are constituted of a fibro-plastie element, similar to that formed by the eeonomy when not under the influence of virulent speeifieity.*

At what time does the induration appear? This is a contested question, to whieh I must for an instant eall your attention. I first of all affirm, that the induration *never* preeedes the ulceration, although sueh has been erroneously stated. It is generally towards the end of the first week following the infeeting eoitus, that the induration first manifests itself; in the seeond week it developes itself. This is the general rule; at all events, it is what we learn by daily observation. But ean an induration be produced sooner, or manifest itself still later? I have never met

* Several micrographers have investigated the induration of chanere, and have come to the same eonclusions. According to Messrs. Robin and Marchal (de Calvi), induration is almost entirely formed of fibro-plastic elements (*Memoir presented to the Academy of Sciences*, at the sitting of the 2nd Nov., 1846, on the Characteristic Elements of Fibro-plastic Tissue, and of the presence of this element in the induration of chancre). The following note, on this subject, was kindly forwarded to me by M. Robin. The indurated ehanere is constituted as follows:—1st, of a layer of fibres of cellular tissue, in which cutaneous elastic fibres are sometimes found; 2nd, of a considerable quantity of amorphous matter interposed between these fibres;—the greater the transparency of the induration, the more abundant is this matter; 3rd, of free fibro-plastic nuclei, forming a considerable portion of the mass, and always aecompanied by at least an equal quantity of eytoblasts; 4th, a certain number of fibro-plastic fusiform bodies are also present.—Fournier.

with it earlier than the third day, and I believe it never manifests itself sooner. There are tardy indurations, as well as precocious. But we must come to an understanding on this point, so as not to mistake for real those pretended indurations which only make their appearance several weeks after the infecting coitus. The phenomenon is tardy when it has not manifested itself during the course of the first week, or commencement of the next. It may develope itself later than this, but it very rarely happens that we see it do so during the third week. As to the indurations that manifest themselves at a still later period, I can only say, *I do not believe in them;* for during the whole course of my long practice I never met with a single case. In short, if a chancre is to become indurated, it commences to be so from the first. If induration does not commence during the first days of the existence of the primitive venereal ulcer, it will not be produced at all. It is therefore an error, gentlemen, to regard this symptom as a *termination.* No; induration is not the termination of chancre: it is rather a symptom which attends its commencement; a symptom no doubt more tardy than ulceration, but which follows it closely, giving it a specific character. Does induration, this valuable symptom, which suffices, in the absence of any other, to characterize the infecting chancre, manifest itself everywhere, in all tissues, as evidently and with the same amount of plastic suffusion? No, gentlemen; and I must here call your attention to some singular as well as important particularities. It has been observed, as I have already told you, that those regions possessing the greatest number of lymphatic vessels are precisely those in which induration establishes itself most readily. Take, for example, the chancres on the corona penis, on the lips, &c. In these parts the hardness of the tissues invaded by the plastic infiltration is such, that you would almost suppose the chancre to be resting on a semisphere of wood or flint. So great also is the effusion,

that the ulcer, being raised far above the level of the healthy parts, has the appearance of a nipple; thus constituting one of the varieties of the *ulcus elevatum*. You will also remark, that in those parts in which the induration is most exuberant, it also persists longer than in any other region. On the other hand (and I hasten to point this fact out to you now, in order that you may see the contrast), there are certain anatomical regions where indurations are ill defined, in which their presence is with difficulty recognised, and from whence they rapidly disappear. Thus, on the mucous membrane of the vagina, on the *caruncule myrtiformes*, on the anus, &c., the base of the infecting chancre is not covered by the indurated and thickened lining which forms a characteristic sign of chancres situated on the corona penis, or any other similar privileged region. Here we only find that variety which I have designated under the name of "*parcheminée;*" the induration is only produced on the surface; it is likewise very slight, and, though easily appreciated by a careful and experienced practitioner, very difficult for a novice. If to these difficulties, which appertain to the character itself of the infection, you add the embarrassments which may result from the disease being seated in deep and almost inaccessible regions, you will easily understand how this characteristic symptom, *induration*, so often passes unnoticed even by the most able and experienced practitioners. Observe also, gentlemen, that induration, so difficult to recognise in these regions, is but a transitory symptom. When once produced, a few days will suffice to allow it to disappear. Whereas in all other parts it survives the ulceration, and persists under the cicatrix; here, on the contrary, it *often disappears before the work of reparation is finished, before cicatrization is complete*. So that the period in which we can recognise its presence is but very limited.

You will perceive, gentlemen, that I do not conceal from you the difficulties which you will have to overcome in order to

detect, in some special regions, the presence of this valuable symptom—induration; these difficulties are great, they often suspend the diagnosis, and even render it for a long time doubtful; but I must add that they are not insurmountable, as we have other characters which render complete the symptomatology of chancre. It is probably owing to my having insisted, more than any other, on the doubts which attend, under these circumstances, the exploration of the base of the infecting chancre, that a monstrous heresy, contrary to my own doctrines, has been attributed to me. It has been said that the infecting chancre does not become *indurated in women;* and amongst the partizans of this doctrine, some have benevolently attributed it to me; at all events, they have made me say that I never refuted it. Let us examine, therefore, what could have given rise to this singular opinion. Is the chancre entirely devoid of the power of indurating itself in women, in whatever spot in which it may be produced? This is evidently absurd, and unsupported by analysis.* Or is the privilege of induration in women only restricted to certain regions, to certain parts of the sexual organs, for example? This is what, I presume, they have wanted me to say. Well; at the vulva, on the nymphæ, the clitoris, and urethra, we meet with fully and perfectly well-defined indurations: the infecting chancre of the labium is as well and as firmly indurated as the infecting chancre in man. It is true that in the vagina, beyond its orifice, induration is neither so hard nor so clearly defined, and may either be absent altogether or difficult to detect. But though sometimes wanting, it may nevertheless be said to exist *in a general manner;* it is indeed formed, and its presence may be detected, *at a certain time* and by certain fingers. As a semei-

* Chancres seated on the organs common to both sexes become indurated in women as well as in men, in the same degree and with the same characters. Such are, for example, chancres on the lips, the tongue, the face, fingers, &c.—R.

ological indication, it may more or less rapidly disappear and be difficult to appreciate. The presence of indurations in women may often be recognised and established, beyond a doubt, in regions not only deep, but almost inaccessible to direct exploration. I have seen a chancre situated on the os uteri, in a woman affected with uterine prolapsus; the neck could, in this condition, be as easily seized between the fingers, and explored as readily, as the extremity of the penis. The base of this chancre presented a *peculiar induration*, cartilaginous, and almost ligneous; and differed distinctly from the natural hardness of the organ upon which it was developed. It is hardly necessary for me to add, that the constitutional symptoms fully confirmed the diagnosis which I had made on the nature of the ulceration. On another occasion I detected, in a woman, a chancre of the rectum, situated very high up in this organ. The patient very innocently confessed the origin of the disease; besides which, the direct examination of the part affected left no doubt whatever as to the nature of the ulceration; so that my opinion was soon formed. Well, the base of this chancre was also, as in the preceding case, *greatly indurated.* If I could have hesitated a moment,—if I had, for example, confounded this induration with one of those callous tumefactions which accompany simple fissures,—I should soon have been undeceived by the apparition of a splendid roseola, which came to confirm my diagnosis. Judge, therefore, gentlemen, whether or not I deny the existence of induration in women as the forerunner of constitutional infection. But let us suspend for an instant the history of induration, this valuable symptom, to which I shall presently return, in order to take up the pathogeny of the infecting chancre.

III.

CONTINUATION OF THE SPECIAL CHARACTERS OF THE INFECTING CHANCRE—SUPPURATION — THE INDURATED CHANCRE IS GENERALLY SOLITARY — STATISTICS—NINETEEN CHANCRES ON THE SAME PATIENT—RAPID DETERMINATION OF THE ULCERATION — ON PHAGEDENISM — IS THE CHANCRE "RONGEUR" A PRESERVATIVE AGAINST SYPHILIS?

I have already, gentlemen, called your attention to the numerous differences which exist between the simple chancre and the variety I am now describing. This theme is far from being exhausted. The simple chancre, as you all know, suppurates profusely, and this suppuration is one of the fertile sources from which the virulent pus is derived. The indurated chancre, on the contrary, generally suppurates little, and produces only a small quantity of serosity, most often sanious and ill-formed. The simple chancre is generally multiple from its origin, or becomes so soon after by a series of inoculations. It propagates and multiplies itself with surprising fecundity. Such is not the case with the indurated chancre, which is generally *solitary*. In most cases a *single* chancre gives origin to the infection.*

* At the request of Mr. Ricord, I have drawn up, on this subject, the following statistic made upon 456 patients, who had been treated, in the Hôpital du Midi, during my "internat," for indurated chancres:—

1. Patients having a single indurated chancre . .	341
2. Patients having several indurated chancres . .	115

The latter are subdivided as follows:—

I.	Patients affected by TWO indurated chancres . .	86
II.	,, ,, ,, THREE ,, ,, . .	20
III.	,, ,, ,, FOUR ,, ,, . .	5
IV.	,, ,, ,, FIVE ,, ,, . .	2
V.	,, ,, ,, SIX ,, ,, . .	1
VI.	,, ,, ,, NINETEEN ,, ,, . .	1

According to this statistic, the indurated chancre is solitary in THREE cases out of every FOUR.

Mr. Clerc has obtained about the same result:—"In 267 patients affected with constitutional syphilis, and in whom chancre was the only antecedent of syphilis, I have found," says Mr. Clerc, "the chancre

However, it is not rare to meet with patients affected with several indurated chancres which have appeared *simultaneously*. One patient, at present in our hospital, has no less than NINETEEN; but this, I repeat, is an exception rarely to be met with.*

224 times solitary, and only 43 times multiple; which, in round numbers, would give about 80 per cent., or eight in ten." If we compare this statistic with the one we gave when treating of the simple chancre, the following proposition of our professor will be found doubly confirmed:— *The simple chancre is generally multiple; the indurated chancre is generally solitary.*—FOURNIER.

* The following is the singular case cited by Mr. Ricord:—

M—— (Louis), aged nineteen, entered the Hôpital du Midi on the 8th July, 1856. Robust constitution; plethoric tendency; never previously affected with venereal disease. On the 14th or 15th of June had a single connexion with the girl Adèle C——, not having had any previous connexion for the space of at least six weeks; no consecutive connexion. Four or five days after this, that is to say, about the 19th, apparition of an urethral discharge, which becomes more intense in the following days. Almost at the same time, development of a number of pimples on the glans, the foreskin, the skin covering the penis, and the anterior surface of the scrotum. These pimples, the patient says, became greatly enlarged, and covered with scabs. Cubebs and injections of the sulphate of iron were administered to the patient at home. On the 8th of July he decided upon entering the hospital. Actual state: gonorrhea; copious running, of a yellowish white colour; several chancres on the penis and scrotum, distributed as follows:—

1. *Chancre Parcheminée on the glans;* superficial ulceration.

2. *Indurated chancre on the corona;* superficial ulceration, cartilaginous induration, semispherical shape, plunging deeply into the subjacent tissues.

3. *Six chancres on the foreskin* (two on its mucous and four on its cutaneous surface). All these chancres, distinctly presenting the characters of the "*parcheminée*" induration, easily recognised. Those situated on the cutaneous surface are covered by a yellowish grey and thin scab, which can be detached with the nail; form, œthymatous.

4. *On the integuments covering the penis, six similar chancres,* the base "*parcheminée;*" form, œthymatous. The greater part of these chancres are about the size of a twenty-centime piece; one only is as large as a five-franc piece.

5. *On the anterior surface of the scrotum,* and especially on the left side, five chancres with indurated bases, ulcerations generally superficial, no scabs.

In all, nineteen indurated chancres.

Bi-inguinal adenopathy, multiple, *hard* and indolent; the bubo is very

If an indurated chancre can multiply itself *d'emblée*, or if several indurated chancres can exist contemporaneously, it

characteristic on the left side; dorsal lymphangytis of the penis, indurated and indolent.

Treatment: Cubebs, thirty scruples; a pill containing one grain of the proto-iodide of mercury. The chancres dressed with lint soaked in aromatic wine; bitter decoctions.

On the following days, the scabs covering the ecthymatous chancres fall off.

On the 21st, some of the chancres are beginning to cicatrize, the running has become serous, the adenopathy continues.

Treatment: Two pills of the proto-iodide; cubebs, fifteen scruples.

28th. The running has stopped; cubebs discontinued; the greater part of the chancres are cicatrized.

11th August. Posterior bi-cervical adenopathy commencing. Pains of the head, especially towards evening. Same treatment.

18th. Complete cicatrization of the chancres; induration of the cicatrices persistant.

22nd. The patient wishes to quit the hospital. Induration still persists on the cicatrices of the integuments covering the penis, on the scrotum, and on the foreskin. Cartilaginous induration of the corona. Posterior bi-cervical adenophy very marked.

This patient returned in the following months to consult Mr. Ricord, at an epoch, however, which I have omitted exactly to state in my notes. He had only continued the treatment for a few weeks, and was affected at this period with confluent aphthæ on the lips, tongue, and soft palate. What adds still further to the interest of this case, is the singular fact that we were able to compare the symptoms presented by this patient with those of two other individuals infected by the same girl.

I shall now, in a few words, describe the cases referred to:—

I.—G. (Ferdinand), aged twenty-one; lymphatic temperament; no previous venereal infection. Connexions with the girl Adèle C——, during the first week of the month of June. No connexion for three weeks previous to this date; no consecutive connexion. Chancre developed during the first days of June; no treatment. Actual state, 22nd July:—A single chancre, having an indurated floor, developed on the summit of the glans penis, on the left side of, and close to the meatus urinarius. Multiple bi-inguinal adenopathy, hard and indolent, strongly marked on the left groin. In the following month, roscola, scabby eruptions on the head, posterior cervical adenopathy, sore throat, rheumatoid pains.

II.—P. (Charles), aged twenty-five. Robust constitution, sanguine temperament; simple gonorrhea in 1850. Connexion with the girl Adèle C—— during the latter days of the month of May. No connexion for several months previous to this period; no consecutive connexion. Three chancres developed a few days after the last connexion; simultaneous

is far more rare to find this kind of ulceration propagating itself, in the locality in which it is situated, by a series of successive inoculations by means of its own virus. At all events, an indurated chancre can only reproduce chancres of its *own species* during the first days of its existence; at a later period, it can only form chancres appertaining to another variety. But I will not, at present, dwell upon this important subject. Whilst the simple chancre has a tendency to extend itself and invade the neighbouring tissues, the infecting chancre has an inverse disposition. *Its limits are soon defined;* its extension seems, in some measure, to be arrested and circumscribed by the deposit of plastic matter which lines its base and its edges. Its extent is, therefore, very limited, and we rarely see it undergo the phagedænic deviation. So rare, in fact, are the cases in which an infecting chancre makes rapid strides, and invades a notable portion of the integuments, that phagedænism has been supposed to offer an *immunity* against syphilis. It is generally believed that when once a chancre has become phagedænic, it no longer infects the economy; as if all the virulence of the disease was exhausted in the part in which the affection is situated. But, unfortunately, the local effects of phagedænism are not a preservation from the diathesis *when the original affection is of an infecting nature.* Immunity is not to be bought even at the price of the most frightful

appearance of gonorrhea. No other treatment but cubebs and injections. Actual state, June 28th:—Three infecting chancres; one situated on the integuments, of the ecthymatous kind; its base, parcheminée: a second on the frænum; its base strongly indurated: the third in the urethra (specific induration of the left side of the canal, on a level with the navicular fossa; owing to the depth of the ulceration, it cannot be seen by forcibly separating the lips of the meatus). Specific bi-inguinal adenopathy. In the following months, a series of constitutional symptoms manifest themselves:—roseola, ecthyma on the forehead, condyloma on the scrotum, scabby eruption on the head, cervical adenopathy, nocturnal cephalæa, deafness in the right ear, &c., &c.—A. Fournier.

destruction, if the destroying ulcer contains the germ of syphilis.*

This is so true, that it has been attempted to establish a necessary relation between this special form of the primitive affection and certain *serious* manifestations of syphilis. Thus Carmichael declared phagedænic chancre to be the prelude of

* At the time Mr. Ricord was delivering these clinical lectures, there happened to be a patient in the wards affected with a *contagious phagedænic chancre*. This chancre had resisted the various medications applied at home, as well as at the hospital. It had destroyed the greater part of the foreskin, ploughed up the corona, on which it had formed a deep groove, and finally carried away one-half of the glans, which was horribly disfigured. This chancre was accompanied by a specific and well-defined bi-inguinal adenopathy, which always remained *cold and indolent*. The patient, whom I watched attentively, was afterwards affected with syphilitic impetigo of the face; alopecia, double postero-cervical adenopathy, intense cephalæa, rhumatoid pains, &c. I was fortunate enough to inspect the woman by whom this patient had been infected. I found on the right labium an indurated chancre, of about the size of a twenty-centime piece; the base of the chancre presented a well-defined induration. In the right groin existed an adenopathy of several glands, hard and indolent. I prescribed the mercurial treatment, and had the chancre dressed only with a piece of wadding. *In the course of a few weeks, without any other treatment, the ulceration was cicatrized.* The chancre, during the whole time of its existence, never manifested a tendency to spread itself, nor assume the phagedænic form. The patient did not follow the treatment as prescribed, and I detected on her, after the lapse of a few months, several constitutional symptoms, viz., roseola, aphthæ on the lips, alopecia, scabs on the head, postero-bi-cervical adenopathy, sore throat, aphthæ on the velum pendulum palati and the amygdalæ, and syphilitic iritis. The patient upon whom this phagedænic chancre manifested itself was about thirty-two years of age, of a strong constitution, and bilious temperament. The woman, aged twenty-one, was likewise of strong constitution, though slightly lymphatic. Both were subjected to the same hygienic influences, as they had been living for a long time together; these influences were, it must be said, of the worst kind, as they worked and slept in a room from which vapours of sulphide of carbon were almost continually exhaling. Here we have, therefore, an example of a *phagedænic chancre* originating as a chancre following regularly its periods, circumscribing itself in a small space, and cicatrizing without any accessory symptom intervening, within the space of a few weeks. Would not this example be sufficient to prove, contrary to ideas formerly entertained, that phagedænism is not transmitted, at all events necessarily, by contagion? See, for further details, Note X.—FOURNIER.

tubercular affections. Thus, Dr. Bassereau, regarding chancre as the touchstone of the constitution, believes that there exists an exact relation between the nature of the primitive symptom and the gravity of the consecutive manifestations.*

You must not consider phagedænism as a distinct disease, as a variety or special form of chancre; it is nothing of the kind: phagedænism is but an *accident, a complication.* Regarded in this light, it may manifest itself in either of the forms of primitive ulceration; only, by a predilection, the reason of which is unknown to us, in most cases it affects the simple or soft form; and this to such an extent, that it constitutes a true exception for the other. We must also add, that the phagedænism of the indurated chancre is generally far more restricted, far less extensive, so to say, than that of the simple chancre. You will rarely find the infecting ulcer destroying the tissues to such an extent, and offering so obstinate a resistance, as the other variety of the primitive ulcer.

This is, gentlemen, what I had to say to you respecting the characters of the infecting chancre during its stationary period; let us now study its progress and termination.

* Chancre is, as it were, the touchstone of the constitution. By the action it exercises on the tissues, we are enabled to foresee by what immediate or distant consecutive symptoms it may be followed. When benign, it will announce constitutional symptoms of little gravity; when malignant, it will, on the contrary, allow us to foresee that the patient will be affected with consecutive symptoms of a serious nature. So that we can put down, as a law, the following proposition. Benign, indurated chancres are followed by *benign syphilitic eruptions and affections of the various tissues without any tendency to suppuration;* indurated phagedænic chancres are followed by malignant syphilitic pustules, and later by ulcerated affections of the skin, suppurating exostoses, necrosis, and caries.—(Bassereau, Traité des Affections de la Peau symptomatiques de la Syphilis, Chap. VII.)

IV.

PROGRESS AND TERMINATION — THE INFECTING CHANCRE PASSES RAPIDLY THROUGH ITS VARIOUS PERIODS — INDOLENCE OF THE ULCERATION — CICATRIZATION — POSSIBILITY OF A METAMORPHOSIS IN SITU — SURVIVAL OF THE ULCERATION — IN GENERAL, THE INDURATION SURVIVES THE ULCERATION — EXCEPTIONS — CURIOUS FACTS RESPECTING INDURATIONS THAT HAD LONG SURVIVED — A SPECIAL CHARACTER OF CERTAIN CICATRICES OF THE INFECTING CHANCRE.

The infecting chancre, once developed, is not slow to limit itself; it rapidly attains the period of specific *statu quo*, and passes with equal rapidity to the period of cicatrization. The indurated chancre is as indolent in passing through its various periods, as it was in developing itself. Also, as I have already told you, it is not rare to find inattentive and careless patients *unaware* even of its existence.

The phenomena which accompany its last period are exactly similar to those of the corresponding period of simple chancre: the edges become flattened, the floor clean, and cicatrization extends itself from the circumference towards the centre.

The infecting chancre, like the simple chancre, on arriving at its terminal period, if left to itself, may, by means of an irregular process of cicatrization, produce luxurious, elevated *fungous and vegetating granulations*, which confer upon each of these forms of the primitive disease a striking resemblance to the mucous "*papule*," or flattened tubercule of the older authors.* But, besides, it may undergo a true *transforma-*

* This resemblance may give rise, especially in the simple chancre, to serious doctrinal errors. It is not rare (and Mr. Ricord has shown numerous examples at his clinical lectures) to find the simple chancre assuming, at a certain period, the aspect and march of the true mucous papule. Now, we all know that this variety of the primitive disease retains for a considerable length of time its specific virulence, so that at the very time this singular transformation is being accomplished, the secretion produced by the chancre may have become inoculable. Hence the possibility of a double error; first, in attributing to the simple chancre the faculty of consecutively developing a constitutional affection — plague muqueuse (con-

tion peculiar to it. I signalized long ago this metamorphosis, on which Messrs. Davasse and Deville (*Archives Gen. de Médecine*, 1845) have published some interesting observations. I shall not at present enter fully into its conditions and symptoms, but confine myself to a few words respecting it. The *general* cause, the diathesis, which, consecutively to the chancre, is to produce the affections special to constitutional syphilis, has a tendency to choose as the seat of its manifestations those regions exposed to some excitation or *local* irritation. Its influence is, as it were, directed by certain conditions, which depend upon the state of the tissues and organs: amongst the principal conditions of this kind are erosions, ulcerations, wounds of all kinds, &c. It is on this account, therefore, that ulceration produced by chancre may become the origin or pretext for the manifestation of the diathesis. This is, in fact, what generally takes place. The chancre undergoes a kind of *transformation "sur place;"* its appearance is modified, its character changed, and, finally, the *primitive* affection is metamorphosed *in situ* into a true *secondary* symptom. Thus the chancre is converted into that which usually succeeds it: it is a *mucous tubercle* established on its

dyloma); second, in conferring upon this pretended condyloma the power of inoculation, which solely appertains to the primitive disease, the chancre. In support of this faculty of inoculation, which the simple chancre can retain at the very time it is undergoing, or has accomplished, this transformation, I may cite the following three facts collected this year amongst the patients attended by Mr. Ricord:—

1. Simple chancre on the foreskin. Inoculation performed, on the twenty-second day of the existence of this chancre, with the purulent serosity collected on the surface of the ulceration, which, being granular, elevated, and covered by a whitish pellicle, resembles a true condyloma, in such a manner as to deceive the most experienced eye. *Inoculation produces the specific pustule.*

2. Simple chancre on the corona, elevated, granular, resembling a condyloma. Inoculation on the 25th day: *positive result.*

3. *Simple chancre* on the corona, in course of reparation; its surface prominent (ulcus elevatum), covered by a kind of transparent and very thin pseudo-membrane. Its appearance is that of a mucous tubercle. Inoculation on the 35th day: positive result.—Fournier.

indurated base. Add to this that the chancrous induration, at times so transitory, may have disappeared by the time this transformation is accomplished.* Hence, gentlemen, the numerous doctrinal and practical errors to which I will limit myself to call your attention. Hence the pretended inoculability of certain mucous aphthæ, which were nothing more than chancres *in the course of transformation.* Hence, also, that singular opinion which makes at pleasure this same form of affection at one time a *primitive* symptom, at another a *secondary manifestation,*—according to which opinion, syphilis might originate by a simple mucous papule, &c.—heresies which I have long since confuted. But there is one point upon which, whilst speaking of the termination of the infecting chancre, I must above all others insist; I mean,

* According to Mr. Ricord and his school, this transformation is accomplished as follows:—

When a chancre is to be transformed into a mucous tubercle (which, according to Messrs. Davasse and Deville, generally takes place between the *fifteenth and fiftieth day* of its existence), it seems previously to enter the period of reparation; its surface, from greyish and flattened, becomes *red, granular, and prominent.* These changes are accomplished from the circumference towards the centre; so that the edges of the chancre may be red and prominent, whilst the centre of the ulceration still retains its greyish colour. Then, contemporaneously with the invasion of the central parts by the granulation, we find a whitish band appearing on the edges. This white plastic secretion spreads over the whole surface, and then a series of modifications produce a regular granular projection entirely covered by a characteristic *membraniform pellicle*, and constituting the mucous tubercle at the last period of its development. This transformation is much more frequent, and takes place *sooner*, in women than in men. It is produced also on all tissues, and in all regions; on mucous membranes, as well as on the skin; on the organs of generation, as on the lips, tongue, nipple, &c. Mr. Bassereau adduces, in his book (page 326), a remarkable example of a transformation of this kind, undergone by a chancre situated on the lower lip. It is certainly, as Mr. B. has observed, this insidious mode of development of the mucous papule which has caused this symptom to be considered as contagious; for the practitioner who examines a patient after this transformation of the chancre is naturally led to suppose that the disease originated by a moist papule, as he cannot discover any other primitive symptom, and as the patient often affirms that this papule is the *first symptom* he perceives a few days after a suspected coitus.—A. F.

induration. What becomes of the specific induration at the time the infecting chancre is cicatrizing? Does it disappear with the ulceration, or does it continue to exist after the chancre? It is almost a general rule that the induration *survives*, for a more or less lengthened period, the ulceration; its hardness and elasticity diminish gradually; it becomes, as I have already said, gelatiniform; then, after a certain lapse of time, which is very variable, it completely disappears, leaving sometimes in its place a dark, violet-coloured stain, slightly flattened, as if a cicatrix had been formed in the thickness of the skin. There are, however, exceptional cases (and I point them out to you at once, in order to clear the ground of irregular and abnormal facts); there are cases, I repeat, in which the *induration vanishes before the chancre*. If you remember what I told you whilst speaking of the infecting chancres of certain regions, such as those on the anus, in the vagina, &c., you know that the conditions of locality may modify the *anatomical* expression of the diathesis to such an extent as to alter its characters and signification. Well, it is precisely in these same regions that the induration, badly defined at the very time the chancre is in full activity, disappears with the greatest rapidity the moment the work of reparation commences to establish itself. It often disappears before the cicatrix is formed; and the base of the infecting chancre becomes at its ultimate period as soft and as supple as that of the simple chancre.

Judge, gentlemen, whether there is not room here for confusion and errors. What elements for doctrinal contest! I must also call your attention to the following particularly, in order to put you on your guard against an *insidious* form of the infecting chancre. It sometimes happens, as I have already said, that the infecting chancre undergoes a phagedænic deviation,—it extends itself and undermines; but in its invading progress, the first tissue attacked by the extension of the ulceration is precisely the indurated disk which is both its bed and its crown; it is the

nucleus of plastic exudation which first becomes the prey to phagedænism. It may happen that at this period the chancre loses the character which you are accustomed to regard as the sign of infection, that is to say, its indurated base. But I hasten to quit the domain of exceptions, to describe what occurs in the generality of cases. I told you just now that, as a rule, induration persists after ulceration. Only this *survival*, so to say, is more or less long. In some cases it will only be for a few weeks; in others, for several months; in others again, for several years. Thirty years after the existence of an infecting chancre, I found the base, originally occupied by the ulcerations, to be the seat of a nodule which could still be easily recognised. My colleagues, Messrs. Puche* and Cullerier, have likewise observed similar cases.

* I have been able to consult, upon this interesting question of the survival of the induration, the valuable statistics of Mr. Puche. Here is what I have deduced from this learned work:—"Nothing is more common than the persistance of induration from the 60th to the 80th, and even 100th day; it is *almost* a rule; at all events, it is the most common case. From the 100th to the 150th day the number of indurations diminish, and the more rapidly as we approach this latter term. Beyond this the number diminishes very notably. However, the number of persisting indurations at the 200th day is still high. Same decrease, but still more rapid, up to the 250th day. Once passed this term, the persistance of induration is but an exception. Then, here and there we find, as pathological curiosities, a few indurations which still persist after a considerable length of time; such are, for example—

	Persisting induration of the cicatrix of a
Chancre on the corona . . .	390th day
,, on the frænum . . .	452nd ,,
,, on the corona . . .	457th ,,
,, on the corona . . .	540th ,,
,, on the corona . . .	602nd ,,
,, on the glans . . .	650th ,,
,, on the corona . . .	690th ,,
,, on the foreskin . . .	700th ,,
,, on the foreskin . . .	755th ,,
,, on the corona . . .	768th ,,
,, on the corona . . .	997th ,,
,, on the corona . . .	1507th ,,
,, on the foreskin (without any more precise designation) . . .	2062nd ,,

But you will easily understand, gentlemen, that the older it becomes, the more the induration loses its characters, and becomes difficult to recognise. Also, at these remote periods, it would be very difficult, not to say impossible, to distinguish, in the actual state of the cicatrix, between the *specific induration* and the hardness inherent to the organised tissue which succeeds it. Sometimes, after diminishing or entirely disappearing, the induration increases or suddenly reappears. These recrudescenses are extremely rare; these relapses are *exceptions*. It is, in general, the influence of the locality which prolongs more or less the *survival* of the induration. You will see it, in general, persisting longest in those parts where it is at first best defined,—where it was produced from its origin with the greatest exuberance. Do not suppose, however, that to survive the chancre, it requires the exaggeration of character. It is not only the deep hemispherical induration which continues to exist for entire weeks and months after the complete termination of the work of cicatrization, but also the superficial variety,—that which only surrounds the ulceration with a thin elastic lamella; that, in fact, to which I have given the name of "*parcheminée.*" The *survival* of the ulceration, far from being rare in the

Finally, on a patient, who entered the Hôpital du Midi for tertiary symptoms (disease of the bones, tubercles, &c.), Mr. Puche was able to discover the seat of the primitive affection after nine years, through the persistance of an *induration*, which could still be readily appreciated. I must observe, that the documents which were forwarded to me by Mr. Puche all relate to cases observed on *men*. I must also add, that in this statistic the *age* of the chancre has always been determined, not by the date of the appearance of the ulcer, but by that of the infecting coitus; a circumstance which, with a few exceptions, does not constitute any very great difference in the numbers. There is one fact which ought to fix our attention in the examination of the long-surviving indurations which I have cited above. It is that of the 13 cases in which the induration survived so long, in 8 at least the chancre occupied the same seat, viz., the *corona*. It is there, as Mr. Ricord has said, that induration defines and extends itself with the greatest exuberance; it is there also that it survives the longest.—Fournier.

chancres parcheminée, is a case of the most frequent occurrence; and you can find numerous examples amongst the patients in my wards. Only, in this variety of chancre, the survival of the induration is always less than in those cases in which the plastic suffusion has been produced with sufficient exuberance to form the large hemispherical nucleus of which I have previously spoken.*

I need not point out to you the advantages you may derive, in diagnosis, from this persistance of the induration, at a time when every other indication of chancre has disappeared. We shall, however, return to this subject. I have now only to call your attention to a singular particularity respecting the cicatrix of the infecting chancre. In some instances, the infecting chancre leaves behind it a peculiar mark; this is the case whenever it occupies a *cutaneous* surface, as, for example, the integuments covering the penis. In this case the cicatrix, which succeeds the ulceration, has the appearance of a rounded, brownish dark macule, possessing a *characteristic bronzed tint*, and which you will not find after the simple chancre. This macule is very persisting. In the course of time, its dark colour, owing probably to a peculiar alteration of the pigment, becomes lighter; and finally assumes a whitish tint, which no longer has a semeiological signification. But the modification occurs very slowly, and the cicatrix retains for a long time the *stamp* of syphilis.

* The exuberance of this plastic suffusion is in some instances so great, that the tissues in which it is deposited become hardened to a considerable extent. I have seen the *whole base of the glans* which seemed to have undergone a cartilaginous transformation, and might have led to the supposition of the existence of *cancer*. One of the most singular cases of this kind was to be found in a patient sent to me by Professor Andral. My colleague and friend, Dr. Vitry, of Versailles, must remember a patient to whom I had been sent, not to judge of the nature of the disease, but to perform the amputation of the penis. I recognised the existence of an indurated chancre, with a considerable *quantity* of plastic exudation; and the pills of the proto-iodide of mercury were substituted for the knife.—Ricord.

I here terminate, gentlemen, the considerations which I intended presenting to you on the pathogeny of the infecting chancre; and I now commence the question of diagnosis, where you will find, I hope, more than one particularity worthy of your attention.

V.

DIAGNOSIS—INDURATION, WHEN WELL DEFINED, MAY BE RAISED TO THE RANK OF A PATHOGNOMONIC SIGN—RESPECTING CERTAIN INDURATIONS CALLED TARDY—ARTIFICIAL INDURATIONS.

That which greatly facilitates the diagnosis of the infecting chancre is the *specificity* of the induration. I need not remind you of all I have said respecting this valuable character. You know that induration, as I have described it, appertains solely to the infecting chancre; it is an eminently pathognomonic symptom. Do not hesitate, therefore, in pronouncing the diagnosis of infecting chancre, every time that you meet with it well defined and well established. But, besides the circumstances already mentioned, in which the ill-defined characters of the induration will cause you to withhold your judgment, there are others that might mislead you in your diagnosis, and which I shall now point out to you. Although the infecting chancre generally originates "*à froid*," so to say, and without inflammatory radiations, there are, nevertheless, certain cases in which it excites around it a more or less lively reaction,—a reaction which manifests itself with the characters peculiar to inflammations. This is what Hunter called ordinary inflammation. The peripherical tissues tumefy, œdematize, and harden. The indurated base of the ulceration is confounded with them, and from that moment the specific induration is, as it were, enchased in the inflammatory tumefaction. At this epoch, the diagnosis, if not impossible, is at all events extremely delicate and difficult; but wait patiently, withhold your

judgment, and here is what will ensue. In a few days the ordinary inflammation will terminate, the tumefaction of the tissues, as well as the œdema, will disappear, and the parts will reassume with their normal size their habitual suppleness. The induration, when laid bare, so to say, and as it were exhumed from the inflammatory atmosphere which surrounded it, will not be long in reappearing, with all its characters, becoming more and more easy to appreciate as the reactional fluxus diminishes. This remarkable particularity of an induration, concealed for a certain length of time, and only becoming apparent at a more or less advanced period, has received but too often an erroneous interpretation. A tardily OBSERVED phenomenon has been made a tardily PRODUCED phenomenon. On account of the induration, concealed under an œdematous atmosphere of common inflammation, having passed unperceived, it was concluded that it did not exist at the first period of the chancre, and had been only produced at the time its presence was first recognised.

You already know, gentlemen, what opinion you have to form on these pretended tardy indurations. Another source of error against which I must guard you is the following :— The cauterization of chancre, as an abortive or modifying method, has become so customary in ordinary practice, that we rarely, in this hospital, meet with truly *virgin* chancres; that is to say, chancres that have not been subjected to the contact of a caustic. Now, you must know that the greater part of those substances by means of which cauterization is practised, and others used in the daily dressing of sores, possess an extraordinary aptitude to harden the tissues; and that by virtue of this influence, they form a base of artificial induration in the chancres submitted to their action. Such is, for example, the effect of the most ordinary caustic, the nitrate of silver, of nitric and sulphuric acid, as well as of the greater part of the escarotics in general use.

Corrosive sublimate, or still better, the chromate of potash,

hardens chancres in a most remarkable manner, so as to deceive even the most careful and skilful practitioners. It would be the same with the acetate of lead, if this substance did not leave on the ulceration a peculiar kind of tattooing; a particularity which does not fail to draw attention, and thus guards against error. Finally, I must further point out to you tannin, alum, aromatic wine, alcohol, pipe cinders (which enjoy great credit amongst the lower orders), and a host of other drugs with which ordinary empiricism *oppresses* chancres, as agents apt to produce those artificial indurations in various degrees. If it is difficult and often impossible to fully appreciate and distinguish separately each of these indurations, judge, therefore, of the difficulty in recognising them when associated and combined. Imagine a chancre spontaneously indurated, upon which cauterization is practised; how shall we distinguish what is the immediate result of the disease, from what may have been produced by the accidental intervention of the caustics? It is here that the diagnosis must be cautiously expressed, and that we must know how to wait. You see that I do not spare induration, and that I wage war against it. But, in pointing out to you all the circumstances in which this valuable symptom may be altered or modified in its characters, I hope to render you the better able to appreciate its incstimable value in those cases in which it appears under a favourable and clearly defined aspect. Do not, however, suppose that our science is restricted to this single symptom, induration. There are other elements of diagnosis to be consulted previous to forming your judgment. I shall commence with Bubo.

ON BUBO.

ON BUBO, SYMPTOMATIC OF INFECTING CHANCRE—PERIOD OF APPARITION—TRIPLE CHARACTER: MULTIPLICITY, HARDNESS, AND INDOLENCE OF THE GLANDS AFFECTED—SPECIFIC PLEIADES—THE INFECTING CHANCRE DOES NOT PRODUCE A SUPPURATING BUBO, BUT IT MAY BE COMPLICATED WITH GLANDULAR SUPPURATIONS, DERIVING THEIR ORIGIN FROM A CAUSE EXTRANEOUS TO SYPHILIS—CAUSES OF ERROR—DOUBLE CONTAGIONS, ETC.—BUBO IS THE NECESSARY COMPANION OF THE INFECTING CHANCRE—SPECIFIC LYMPHANGITES—RETURN TO THE EXTERNAL CHARACTERS OF THE CHANCRE IN GENERAL—IS THE PRIMITIVE DISEASE IMMUTABLE IN ITS FORM?—POSITIVE CHARACTERS OF THE INFECTING CHANCRE.

The infecting chancre, like the simple chancre, exercises a powerful influence on the glands, into which the lymphatic vessels of the affected part throw themselves; and produces a bubo of a peculiar nature, which it is of the utmost importance to understand thoroughly. This bubo differs as much from the symptomatic adenitis of the simple chancre, as this latter variety of ulceration does from the indurated chancre. To begin with, the symptomatic bubo of the infecting chancre has a fixed and almost necessary period of apparition; in general it coincides with the induration of the chancre, or follows it immediately. It is produced during the course of the first or second week, rarely manifesting itself later than this period. You know, on the contrary, that the adenitis, peculiar to the simple chancre, has no fixed period for its development. It may be precocious as well as extremely tardy in making its appearance. I may remind you that it has been known to manifest itself in the third year after the existence of a chancre.*

The adenopathy peculiar to the infecting chancre, consists at first only in a simple glandular enlargement, indolent in its nature, and generally unperceived by the patient. A few days are sufficient for it to increase and acquire the following characters which appertain to a well-established bubo. This

* Consult Note VII.

bubo consists in a remarkably hard and indolent tumefaction of the glandular pleiad corresponding to the seat of the chancre. The glands, increased in size, usually have the appearance of a series of small tumours, of an ovoid shape, extremely hard, independent of each other, and movable in the parts which surround them. These small tumours are completely indolent, and painless. They cause no greater sensation of pain than that which might result from the uneasiness produced by their encroaching upon the surrounding parts. They are *extremely hard*, and this hardness is of a peculiar kind. It gives to the finger exactly the same sensation as the indurated base of an infecting chancre; it is a cartilaginous, elastic, resisting hardness; it is (if I may be permitted to use the expression) the base of the chancre transplanted into the glands. These small tumours are totally independent of each other. They do not coalesce or adhere to the surrounding cellular tissue, so that they roll freely under the finger. They are, as I have already told you, almost invariably multiple. It is not a single gland, as is the case in simple chancre, that takes and concentrates in itself all the radiating influence of the primitive chancre, it is the whole of the glands corresponding to the affected region upon which the specific reaction is exercised: hence the name of pleiad given to the multiple tumefaction. But in this pleiad you will always find, and it is a circumstance worthy of notice, one gland more developed than the other. It is the one in which the lymphatic vessels of the ulcerated part terminate; it is the one which would become, in the case of a simple chancre, the seat of specific suppuration. I call it the anatomical gland of the pleiad, as considering it to be subjected directly to the influence of the chancre by continuity, whereas the surrounding glands are only affected by diathesic sympathy.

It is a fact no less singular to find the effects of the chancre often extending themselves in a nearly symmetrical

manner from one side of the body to the other on the two congenerous pleiads. Suppose, for instance, an indurated chancre of the penis, situated on the left side of the corona, or on the integuments of the same side; you are sure to find in the left groin the specific adenopathy well defined, with its triple character of hardness, indolence, and multiplicity; but it may happen (and this is the general case) that you likewise meet with a similar bubo in the left groin well defined, and notwithstanding its lesser development almost equally characteristic. It is rare to find the symptomatic bubo of the infecting chancre assuming considerable proportions. When no complication is present, the affected glands seldom surpass the size of a hazel nut, or at the utmost of a small walnut. This bubo possesses *no tendency to inflammation*, or to undergo specific suppuration; it is produced and terminates "a froid," remaining completely indolent during its whole existence. Can we deduce from this that it is completely guaranteed against inflammatory reaction? No, indeed, the existence of an indurated bubo does not constitute for the glands an immunity against the various causes of ordinary inflammation — far from being so, it is rather a predisposition. The morbid state of the glands acts as a challenge to the various diatheses which may find in it the pretext for a manifestation of the specificity of their influence. Thus we frequently find the indurated bubo, symptomatic of an infecting chancre, becoming the origin of a strumous glandular swelling in patients of scrofulous diathesis. In the same manner, the other causes of inflammation may convey their special influence to the glands indurated by syphilis, and cause, without the intervention of any virulent action, an inflammatory state susceptible of ending in suppuration.*

* Amongst the great number of indurated chancres treated by Mr. Ricord during the year 1856, three only were to be found accompanied by suppurating buboes. In these three cases the suppuration was only pro-

It is necessary to bear in mind that *the symptomatic bubo of the infecting chancre never suppurates by itself*, and without the intervention of an extraneous exciting cause. Do you require a convincing proof? Make a trial of the pus which it furnishes in the rare instances in which it arrives at suppuration, and you will never obtain by artificial inoculation the characteristic pustule of chancre. It is as much as saying, that this bubo never suppurates specifically. The pus which it produces is simple, inflammatory, ordinary, and unmixed with virus.*

duced consecutively to a strumous degeneration of the glands. The glandular pus was twice tested by inoculation, and on each occasion found to be negative.

* In these cases, it is of the utmost importance not to be misled by new chancres which the patient may have contracted on old indurations, and which, in such cases, following the law of non-indurated chancres, might give rise to virulent adenitis with inoculable pus. These new chancres, on borrowed indurated bases, are frequent, &c.—Ricord (*Lettres*).

Here is another cause of error. It may happen that an infecting chancre is contaminated, at a variable period of its existence, by the pus of a simple chancre, and that the ulceration assuming then the characters of the simple chancre exercises on the glands the influence peculiar to this variety. If we do not bear in mind the possibility of this double contagion, we are liable to fall into an inevitable confusion, attributing to the indurated chancre what is produced by the simple chancre, and *vice versâ*. Instances of double contagion are frequent enough. They are the more liable to cause error, because the patients, being in general ashamed of not having abstained from sexual intercourse at a time in which they were already affected with chancre, do not avow, or attempt to dissimulate, the conditions of a consecutive contagion. The following is a case of this kind. It will be observed that the origin of the second contagion is defined in a doubly significant manner.

N. Alphore, aged 17, contracts a chancre towards the end of September. He presents himself at the consultation at the Midi, where the following state is established on the 3rd of October:—Indurated chancre on the corona; cartilaginous induration; multiple bi-inguinal adenopathy, hard and indolent. Dressing with aromatic wine; mercurial treatment. The 7th, same state. The 14th, improved state of the chancre (period of reparation commencing). 24th, the state of the patient is greatly changed. The chancre on the corona has become broad and hollow; its base is still greatly indurated. Moreover, there exists on the integuments covering the penis a large chancre with an œdematous base, but without true induration; several small chancres, with a soft base, on the cutaneous surface of the foreskin.

Such, gentlemen, is the symptomatic bubo of indurated chancre. You will easily understand that with characters so well defined as those which I have described, it must truly constitute a pathological individuality and assume an important place in the diagnosis of the infecting chancre. Another circumstance of the most fortunate kind for diagnosis, is the persistence of the bubo long after the cicatrization of the affection by which it was originated. If you find in some instances the induration peculiar to chancre rapidly disappearing, on the other hand, the specific adenopathy retains for

The patient affirms, in the most formal manner, that he has had no connexion with any woman since the time he contracted his first chancre. Are we, therefore, to attribute the new chancres to an accidental inoculation, to a contagion of vicinity? N. enters the hospital on the 24th. In the first days of November appearance of acute adenitis of the left groin, presenting all the characters of the bubo peculiar to simple chancre, — suppuration; positive inoculation of the glandular pus. In the right groin persistence of the adenopathy peculiar to the infecting chancre; glands multiple and indolent. In December, secondary affections; roseola, &c. Notwithstanding the denials of the patient, Mr. Ricord did not hesitate in ascribing the origin of the second chancres to a second contagion, resulting from a recent coitus. And truly, a few days after he had entered the hospital, N. informed me very confidentially that on the 15th of October he had had connexion with a woman named P——, whose address he gave me. "On the following morning," added the patient, "the chancre on the corona had already commenced to extend itself, and two days afterwards the other chancres made their appearance." I immediately went to the woman P——, and detected on her the existence of three large chancres, with soft bases, situated on the internal surface of the left labium, on the fourchette, and upon the folds at the entrance of the vagina. This woman had also infected another man, who was likewise the subject of soft chancres and an acute bubo, and complicated with acute adenitis of the left groin. An individual bearing an infecting chancre at the period of reparation, and an indolent specific bubo, has connexion with a woman affected with simple chancres. He contracts new chancres, simple chancres, one of which implants itself on the still ulcerated area of the infecting chancre. An acute bubo then manifests itself, which soon suppurates specifically (bubo of absorption, glandular chancre). Finally, symptoms of constitutional syphilis manifest themselves. Is it not likely that any practitioner, less experienced than Mr. Ricord, would have attributed this specifically suppurating bubo, symptomatic of a simple chancre, to an infecting chancre?—A. Fournier.

a long time its characters. It is usual to find it well defined several months after the origin of the chancre, and sometimes after the lapse of several years unequivocal traces of it are still to be recognised. It is, therefore, an eminently persisting symptom, and in more than one case it is the only sign that can put you on the trace of the unknown or concealed origin of constitutional syphilis, when every other primitive affection has disappeared. Never neglect, therefore, when examining a patient affected with constitutional disease, and who denies suspicious antecedents of every kind, to *interrogate the glands*—specific adenopathy is for the infecting chancre an effect which follows its cause. Well, search for the cause through the medium of the effect; and for this purpose the indurated bubo is of the highest value, as it is not only the manifest symptom of a special disease, but, moreover, a sign indicating the seat occupied by the affection. By this means you will be put on the trace of chancres occupying unusual localities, of such as may have existed unknown to the patient as well as of those he may wish to conceal. Thus, an epitroclear or axillary adenopathy will often indicate the existence of a chancre seated on the corresponding extremity, and very generally a *digital* chancre; thus, a submaxillary bubo will reveal to you a chancre on the lips; thus, also, by the swelling of the glands, which form the extreme limits of the inguinal pleiads, you may suspect a chancre on the anus; and so on of many other affections situated in more or less unusual localities, the existence of which patients frequently attempt to conceal. If these various adenopathies furnish a diagnostic indication of the highest importance, while the primitive affection still exists, judge what must be their value when this affection has disappeared. In fact, gentlemen, the variety of bubo that I have just described, is essentially peculiar to the infecting chancre. You will never find this bubo with the simple chancre, with gonorrhœa, or with any other affection of

venereal or ordinary origin—*it belongs exclusively to the primitive ulcer of contagious nature.** Moreover, it is a symptom never absent, and which you may invoke with the greatest certainty: the indurated bubo is the faithful, and I may add necessary, companion of the infecting chancre—it inevitably follows it. No doubt it may be more or less well defined,

* It is a remarkable fact that the distinction, in a rudimentary manner at least, between the two varieties of bubo, can be traced to a remote epoch. Thus the eye-witnesses of the first ravages of syphilis in Europe, Marcellus Cumanus, Benedetti, Léonicène, and Gaspard Torella, do not describe the suppurating bubo amongst the symptoms of "*mal français.*" It is the same with Fracastor and Sebastien Montius. Nicolas Massa was one of those who commenced the confusion, by describing, without separating, the two varieties of adenites. However, as Mr. Bassereau has remarked, it could not escape his spirit of observation that chancres, followed by suppurating buboes, are not the same which give rise to the cutaneous eruptions and pains which accompany the "*mal français.*" He even announced this proposition, that patients affected with suppurating buboes are generally exempt from consecutive manifestations. "Et sequuntur apostemata inguinum quæ, si suppurantur removent ægritudinem, maximè a principio, quoniam inguina sunt emunctoria hepatis per quæ expurgantur materiæ." I have found this same opinion in the writings of a host of authors, of Ant. Gallus (De Ligno Sancto, chap. i.), of Thierry de Héry, A. Paré, Rondelet, Bourru (1770), &c. However, it is to be remarked, that whilst signalizing the absence of constitutional affection following a suppurating bubo, the preceding authors did not the less consider this bubo as a symptom of syphilis; only they regarded it as being a kind of emunctory, by means of which the organism relieved itself of the virulent principle by suppuration. This was the opinion of Massa, as shown by the preceding citation. See what A. Gallus says, "Hæc si suppurat, frequenter bono est tota foras eliciatur illuvies; quod si vis pestifera in jecur regeratur certum est luem non evitari." And also A. Paré:—"Then the virus will increase, and be carried by the veins . . . . and the liver, suffering from such a state, often, by its expelling faculty, drives the said virus to the groins, and forms bubos, which, unless they get rid of the matter they contain, and disappear by absorption, this poison infects the whole mass of the blood from which syphilis originates," &c. If, therefore, it is an established fact, according to the preceding citations, that the immunity following a suppurated bubo had not escaped the older authors, it is no less certain that they were unable to afford any explication of the phenomenon. It is to our century and to our professor to whom the honour is due of having established a nosological distinction betwixt these two varieties of bubo in collocating each of them with the species of chancre by which it is produced.—A. Fournier.

more or less manifest at the different periods of its existence. But the radiation of the infecting chancre on the glands can always be appreciated in various degrees, and it is always whilst retaining the character which I have just described that this influence is conveyed and exercised.*

To resume. *There can be no infecting chancre without an indurated symptomatic bubo.* This may be called, without hesitation, a pathological law, and I need not point out to you all its importance, or signalize its inestimable value in practical diagnosis as well as in doctrinal questions. One word more on the lymphatic reaction of the indurated chancre. Between the chancre and the glands there is an intervenient which may be affected, and modify, in its own manner, the influence of the virus: this intervenient is the lymphatic vessel extending from the base of the ulcer to the corresponding gland.

In the first variety of chancre which we studied, it is rare to find the virus stopping in the lymphatic vessels, while it travels through them. The conveyance of pus to the glands is effected with a rapidity which does not allow of contagion, so that symptomatic lymphangites of the simple chancre are extremely rare in comparison to bubos; when produced, they assume the character of an acute inflammation, sometimes simple, but generally virulent; the pus remaining in the lymphatic vessels produces a direct inoculation; a chancre is formed, and to this an abscess succeeds, which follows the ordinary march of "ANGEIOLEUCITIC" abscesses, only with this

* So great is the diagnostic value of bubo thus defined, that it may be regarded as a character in some measure superior to the induration of chancre. Mr. Cullerier says: "The whole diagnosis of chancre does not consist in the local state, and when induration is absent, it must be sought for elsewhere. When induration is absent in a doubtful chancre, it is in the corresponding glands that I seek for the diagnostic element; I will not say complementary, but indispensable; and I do not see why the infecting reaction, not making itself apparent in the ulceration itself, should not convey its action on the glands, which in this case substitute themselves for the chancre, &c."—FOURNIER.

particularity, that the purulent secretion holds in suspension the virus of the chancre, and that the consecutive sore may present the characters of a *specific ulceration*. In the same manner, the indurated chancre, when it affects the lymphatics, retains, while it attacks them, its usual mode of influence and peculiar march. Here we have no intravascular inoculation, no acute phenomenon, no suppuration—nothing but a plastic suffusion—the lymphatic vessel *tumefies whilst indurating* in the same manner as the gland, and remaining, like it, *cold and indolent*. By the touch you will easily recognise it, under the form of a long cord, presenting, at times, here and there knots or swellings, which give it a beaded appearance. The cord is hard and moveable on the surrounding parts, independent and easily isolated, and causing, when felt, nearly the same sensation as that produced by the vas deferens. Induration and indolence are, therefore, the only characters of the symptomatic lymphangitis of the infecting chancre. This kind of plastic angeiolcucitis is far from accompanying in all cases the indurated bubo. It is not, therefore, like the adenopathy, a necessary symptom of the infecting chancre. Induration of the base of the chancre, indolent and hardened bubo; these, gentlemen, are the two principal characters by which you will recognise an ulcer of the infecting nature. No doubt the other indications that I have described in tracing the descriptive history of the infecting chancre may aid you in establishing your diagnosis. But these various signs, remember, are far from possessing the same value as the two latter. If you expect to find everywhere and in all cases—if you only consent to ticket an ulceration after having recognised the classic characters of chancre, you will often run the risk of suspending your diagnosis to the detriment of your patients and of your personal consideration. I have often repeated and written, that the *primitive affection*, to whatever variety it belongs, *is far from being immutable and eternal in its external appearance*. Here, it

is the typical chancre, with its abrupt edges, greyish floor, &c.; there, it is only a superficial ulceration, with its rose-coloured floor; elsewhere, it will be a true ecthymatous scab; elsewhere, again, a simple fissure; farther on, an erosion resembling an "*écorchure*" of the most benign kind, &c.; and then it assumes many other unforeseen forms, differing almost to infinity.* But if there are numerous differences in the external signs of the chancre in general, there are constant and immutable characters which belong especially to the infecting chancre, by means of which it ought to be distinguished with certainty from all other ulcerations, extraneous or not to syphilis. These characters, I repeat, are the pathognomonic induration of the base of the chancre and the specific bubo, which you know. Here end, gentlemen, the considerations that I intended presenting to you on the diagnosis of the infecting chancre. I now commence the principal point in its history; its prognosis.

VI.

PROGNOSIS—LOCAL PROGNOSIS—GENERAL PROGNOSIS—INDURATION IS THE FIRST SYMPTOM OF A DIATHESIC SYPHILIS, OF WHICH THE MANIFESTATIONS BECOME APPARENT AT A STATED TIME—NATURAL EVOLUTION OF THE DIATHESIS—PRIMARY AFFECTIONS—SECONDARY—TERTIARY—CHARACTERS OF EACH OF THE THREE PERIODS OF SYPHILIS—IS THE INFECTION IN PROPORTION TO THE NUMBER AND EXTENT OF THE PRIMITIVE ULCERATIONS?

If we only consider the local consequences, indurated chancre is, no doubt, the most benign variety. You know that it is generally solitary,—that it has no tendency either to multiply or extend itself,—that it limits itself in a few days, and that it runs rapidly through its various periods to arrive at cicatrization. Here we have, no doubt, many favourable conditions for local prognosis. A chancre which has become *indurated*, is an *infecting* chancre; it is no longer a local affection, it is the *first symptom of a diathesis;* it is the com-

* Lettres sur la Syphilis, p. 214.

mencement of a constitutional affection, the prelude to syphilis. In the simple chancre, the ulceration constitutes the entire disease. In the case of the indurated chancre, *ulceration* is not an important sign: the true malady lies in the infection of the organism. For induration, gentlemen, is the commencement of infection; it is the first effect of the general intoxication. The moment it is produced, syphilis exists.*

Thus we ought not to regard induration so much as the origin of syphilis, but rather as a *consequence* of the constitutional affection. It is less a *cause* than an *effect*. The induration which subtends the base of the chancre is but a kind of local reaction of the general intoxication; it is, so to say, *the first of the secondary symptoms*. The indurated chancre is, therefore, gentlemen, the prelude of a diathesis; and this diathesis, pregnant with misfortunes and tempests, is *syphilis*. Well, I have often repeated, and I still uphold, that *induration* is a symptom announcing an infallible explosion of constitutional affections. When once produced, it is *necessarily* followed by symptoms peculiar to syphilis, and that within a space of time which, by long and patient observation, I am able to determine with precision. Let us suppose a chancre thoroughly and evidently indurated; the patient, and I mean a patient in Paris, submitted to *climaterie* conditions known to us; the patient, I repeat, is left without treatment. I affirm with the greatest certainty, *that six months will not elapse without manifestations coming on of syphilitic intoxication*.†

* Ambroise Paré had already understood the pathological signification of induration when he wrote the following passage:—"If there is an ulcer on the penis, and if the part is hardened, it will be an infallible sign that the patient is affected with syphilis." What more has been said by the school of the Midi, which has been overwhelmed with reproaches on account of the absolutism of its doctrines on induration?—A. F.

† I say at Paris, and intentionally, for when we have to determine the phenomena of syphilitic evolution, in keeping account of the infection and

The apparition of constitutional affections following induration, in a fixed and limited period, constitutes, therefore, gentlemen, a veritable law; a law which the physiological school has allowed us to verify a thousand times, and which the carelessness of patients comes every day to confirm. Thus syphilis is entirely contained in that drop of virulent pus which produces by inoculation the *indurated* chancre; and this chancre is but a primitive diathesic manifestation to which *inevitably* succeeds, in the free evolution of the disease, that series of affections which constitute the *confirmed syphilis* of the old authors; the constitutional syphilis of our times. These affections can even be determined beforehand. In fact, syphilis, which has wrongly been accused of being errant, is, on the contrary, of all the affections contained in the nosologieal table, the most regular and methodical in its development. Nothing within its empire is trusted to chance—it repudiates anarchy. It has forms by which it commences, as well as *distant* symptoms. It assumes for each of its *ages* a peculiar aspect. Syphilis, if I may be allowed to make the comparison, is a ribbon which unrolls, and the colours of which vary after a certain number of turns, without the tints of one end allowing you to re-

the poisoning, we must not neglect the necessary causes which may modify its march. Thus, *in the climate of Paris* no infecting malady ever passes the period of six months without a constitutional manifestation. When I established this general rule, in an access of generosity, I had enlarged the kind of circle of Popilius, in which I had enclosed the primitive infecting disease; and I extended to *one year* this period of six months. On this account, I have been censured by my learned colleague and friend, M. Puche, who blames me for this, according to him, uncalled-for generosity. Also, whoever will give himself the trouble to follow the syphilitic evolution, will in a short time be thoroughly convinced of its truth. I defy the unbelievers, and call them to the field of battle at the Hôpital du Midi: let them come, and they will see that in every case of primitive affection, well defined and well diagnosticated, and, moreover, never submitted to any previous treatment, six months *will not go by without a constitutional manifestation*.—Ricord (Discours à l'Académie de Médicine, sitting of the 11th of October, 1853).

member those of the other. In the evolution of the disease there exists a group of affections which eharaeterize the first explosion of the diathesis—general lassitude, neuralgic and rheumatoid pains, eervical adenopathy, alopecia, eutaneous eruptions of exanthematic kind, &e. These are, gentlemen, the affeetions already well known to you, the *initial group* of symptoms called *seeondary*,—symptoms which are multiple, *scattered*, and announee a *general* state of infection pervading the entire system,—but whieh are always *superficial*, affeeting only the surfaee, never the deeper parts; they are generally of a dry eharacter; and finally their *local* prognosis is without gravity. These are, gentlemen, the symptoms whieh entirely or partly eonstitute the retinue of the indurated chanere within the *inevitable period* of the first six months, unless some specifie treatment alters the natural order of evolution of the diathesis. And I may add, these are the only affeetions you have to fear in this period, for the other manifestations of syphilis appertain to a more advaneed age of the disease. Syphilis, in faet (and I purposely return to this important subjeet), in the majority of cases, progresses with a regularity which may, so to say, be eompared to that of the planetary system. Each affeetion, each phase, each group, has a period—a time fixed beforehand and *almost* invariable. One manifestation will appear to-day, another will take months, nay, years perhaps, to appear; and so on for the entire evolution of syphilis. I only know, as an exeeption to this rule, some few and very rare cases of that species of syphilis ealled "*gallopante*," in whieh affeetions of every form and nature, but always of great gravity, burst out a short time after the ehancre; and whieh sueeeed eaeh other with sueh incredible activity and formidable eonfluenee, that they reeall to one's mind the fearful aeeounts of the fifteenth century.*

* It appears, however, that the intensity with whieh syphilis first manifested itself rapidly diminished; for from the first years of the six-

Thus the divisions which I have long since established; the *stages* in which I have arranged the various affections of the diathesis: in one word, the classifications I have formed, are now generally adopted, and have become almost *popular*, for this reason only, that they are *natural*, and conform to clinical truth. I do not only find them in the language and writings of my pupils, but detect them in the mouths of my antagonists. How often have the expressions, so simple, yet so fiercely attacked, of primary, secondary, and tertiary affections been employed by those very adversaries who showed themselves most eager in refuting my doctrines!

But, as I have said elsewhere, if I have made syphilis my study, I certainly have not invented it. I have only followed nature in her manifestations, and described the phases she undergoes. Thus it is not surprising that I should concur with Thierry de Hery, with Hunter, with my two learned colleagues, whom I cannot cite too often, Messieurs Cullerier * and Puche; in one word, with all the syphilographs who have studied the question without party spirit, in ad-

teenth century authors assert that the disease daily became less virulent. On the one hand, the manifestations became fewer and less intense; on the other, the succession of symptoms was less precipitate. This is, at all events, what appears to result from various passages which it would be tedious to quote here. I shall merely say, that during *the first years* of the sixteenth century, Jean de Vigo, Jacques Catanée, and many others, pointed out the possibility of a period intermediate between the primitive symptom and the consecutive manifestations, a period exempt from any affection. "Evenit in hoc morbo quod in morsu canis rabidi; in aliquibus enim cito apparet quid noceat, in aliquibus vero *occultatur et menses et annos.*" (J. Catanée, de Morbo Gallico.)

* In the symptoms of syphilis there is a *fixed progression*, I might almost say invariable, and which being *ever the same can be predicted with certainty*. The order in which these symptoms manifest themselves is subjected to a regularity similar to that which we find in every morbid evolution, and to arrive at a rational method of cure we must first thoroughly understand this succession. The division of the symptoms of syphilis into three periods is *now universally accepted*, and my own observations come to strengthen still further this opinion.—Cullerier, (Memoire sur l'Evolution de la Syphilis, lu à la Société de Chirurgie, en Décembre, 1844).

mitting the same phases in the disease, and in describing the same groups of affections.*

Allow me, therefore, to describe to you the disease, such as it is presented to us by clinical observation. The drama of syphilis is divided into three acts or periods :—

First Period.—Primitive affection: the chancre the inevitable source of *acquired* syphilis; the chancre with its faithful companion the bubo, which you already know.

Second Period.—Secondary affections, opening the scene to the constitutional symptoms of syphilis; that is to say, succeeding the chancre within the *first months* of its existence. Affections of the superficial tissues. I have already described their nature and seat, and therefore shall not repeat them.

Third Period.—Tertiary affections, only manifesting themselves at a distant epoch from the original affection—rarely *sooner than six months*—capable, however, of appearing at any time—affections of the deep tissues; affections so dissimilar from those produced on the external parts, that they seem, as Hunter observes, to constitute another disease.†

If you will permit me to digress, I will point out to you other dissimilarities which separate still further these three groups of affections. It is only in the first period that you will meet with the *inoculable virus*. When once the chancre is passed, so to say, the virulent specificity is extinguished. The *primitive affection* is the only one which is incontestably contagious.‡

* *Vide* Note XI.

† Hunter (Constitutional Syphilis, ch. II.)

‡ This is another opinion common to me and to my two learned colleagues of the Midi. The following is Mr. Cullerier's definition of the secondary affection: "The secondary affection," he says, "consists in the manifestation on the skin or mucous membranes of lesions having a special character, which are necessarily connected with the primitive affection, and only produced when it has existed; lesions of this kind are not *contagious by contact*, and only hereditarily transmissible."—Mém. cit. Archives Gén. de Méd. 1845, p. 203.—Ricord.

Secondary syphilis is hereditary; not *inevitably* so, as I have been accused of having said, but *generally*. The older the diathesis becomes, the more the hereditary influence seems to diminish; and in the well-established tertiary period it probably entirely disappears, to become, as Lugol supposed, and as I myself am inclined to think, a predisposing cause to scrofula. These are, gentlemen, the grand divisions which nature, not my own imagination, has traced in the evolution of syphilis. I have often heard my medical colleagues, in a case, for instance, of scarlatina or small-pox, instantly announce, *de visu*, the exact date of the origin of the affections, and the *precise day* on which the eruption took place. Such was the correctness of their judgment, that the testimony of the patients always confirmed their prediction. Well, it does not require, in syphilis, either great efforts or great meditations to acquire a similar, if not equal, precision. I again repeat, each of the affections of syphilis bears the stamp of the group to which it belongs. In one superficial affection, an exanthema, for instance, you will easily diagnosticate that the syphilis is still *young*, only a few months old, while in another you recognise the syphilis to be *old*, by means of some other symptom affecting the deeper tissues. I may add that this appreciation of the age of the disease is not devoid of *practical* utility, as you may deduce from it useful indications for its treatment. The preceding enumeration of the affections peculiar to syphilis, though rapidly made, will suffice to prove to you that the various tissues of the economy, whether deep or superficial, may be affected, and bear the stigma of syphilis. The skin, the mucous membranes, the cellular tissues, the periosteum, bones, muscles, viscera, &c.; in fact, all the organs are susceptible of being affected by this poison; they all pay to syphilis the tribute which it has the right to impose, sooner or later, upon the various parts of the contaminated organism. It is, therefore, gentlemen, a general affection, in the widest acceptation

of the word, as it attacks indiscriminately all tissues and organs. It is a veritable *diathesis*. Incorporated, as it were, with its victims, syphilis, as I have often repeated, creates for them a new *temperament*, a morbid constitution. For this reason, Hunter had baptized syphilis by the name of *constitutional* infection; "because," said he, "the virulent matter, by which it is originated, is carried into the general circulation, so that every part of the economy may be impregnated with it." One word more, gentlemen, before we terminate what relates to the prognosis of the infecting chancre. Is the gravity of the disease, which I have just described to you, in proportion to the *number* and extent of the primitive affections? Certainly not. I can affirm, contrary to the opinion of a great number of practitioners, that the intensity of the constitutional manifestations is by no means in a necessary proportion to the number of chancres. A single chancre infects as well as several. The multiplicity of the ulcerations adds no more to their poisonous effects than the multiplicity of the vaccine pustules does to preservation. One case of syphilis, succeeding to a pleiad, as confluent of primitive affections as you may like to imagine, may only manifest itself under a light and benign form; whereas another, originating from a single chancre, will offer manifestations of the most serious nature. The same may be said of the extent of the primitive ulcerations. The smallest chancre infects like the largest, in the same degree and with the same consequences. It is entirely opposed to clinical observation to wish to establish a relation between the extent of the primitive ulcer and the gravity of the consecutive symptoms.

I shall now say a few words concerning certain influences which may modify the natural order of evolution of the diathesis.

I have, gentlemen, briefly described to you the order of evolution of the diathesis. Allow me now to point out

certain influences which may modify the natural development and alter the normal succession of affections. The different conditions of the constitution, the variable disposition of the tissues, the numerous particularities depending on sex, age, habits, and temperaments of the patients, and the treatment they have been subjected to, etc.,—these form, gentlemen, influences which must be borne in mind, as capable of exercising a considerable action on the early or tardy development of the morbid manifestations, as well as on the general character of the disease, considerations of the highest importance, which had not escaped the penetrating mind of the great Hunter, and which have been too often forgotten in the contemporary criticisms directed against the natural and methodic subdivisions of syphilis.

We will now examine what may be the consequences of these various conditions. When a diathesis is *powerful*, casual causes, often of the slightest nature, are sufficient to bring it into action, that is to say, for the production of a manifestation in the specificity of the morbid state. But these causes may either exist or be wanting; they may appear sooner or later, and persist for a variable time. Hence so many differences in the development of the disease; absence or manifestation of certain affections, hasty or tardy evolution of the diathesis, reproduction of the same symptoms beyond the normal period of their customary manifestation, etc. Thus, taking one of the affections as an example, you may find aphthæ manifesting themselves at a very *early period* either on the vulva (owing to the local anatomical conditions which provoke its apparition) or on the nipple of women who suckle, that is to say, on a spot where the excitation caused by the application of the lips of the child *solicits* the action of the syphilitic principle, diffused throughout the entire system. Thus also you will find this same affection, mucous tubercle, produce and reproduce itself in the mouths of smokers with an invincible obstinacy, and always excited by

the same irritating cause; make its appearance again in the same locality, long after the time in which syphilis usually manifests itself under this form. This latter particularity of *relapses* in syphilis has more than once given rise to errors and attacks against the doctrine that I uphold. It is not rare to find certain symptoms of the diathesis, after manifesting themselves during the *classic* period to which they belong, reappear at a more or less distant epoch, and in a stage of the affection in which it is not usual to see them appear. Those who were not aware of the first manifestation, and who ignore the possibility of the singular relapses which I have long since signalized, would find here an exception to the laws of the evolution of syphilis,—a case which should destroy all classifications! You see, however, gentlemen, that there is nothing in it that does not conform to the rule. Another source of error, another origin for similar exceptions. It is the *treatment*, no doubt, which causes the greatest confusion in the development of the diathesis, and which seems to prevent its methodic classification. In a general manner we may say, that mercury has the effect of *retarding* the constitutional affections, when it does not entirely prevent their appearance.*

* Mercury may weaken, to such a point, the influence of the diathesis, that not a single symptom appertaining to the second period may appear. It exercises, however, but a very slight action on the more tardy manifestations which appear *without having been preceded by any other affection*. In these cases an act in the drama of syphilis is omitted; or, in other words, a link is wanting in the chain of the evolution of the morbid symptoms. But these cases are extremely rare. According to our Professor, it is a veritable exception to find an indurated chancre not followed by *any* constitutional manifestation in the secondary form, and this notwithstanding the application of a rigorous mercurial treatment. In the greater majority of cases, and even in patients the least affected, some symptom, however slight, is produced, which, to an experienced eye, betrays the existence of the diathesis at a period not far from that in which the contagion was contracted. Moreover, if, with MM. Ricord and Cullerier, we are to consider specific induration in the light of a constitutional affection, as a manifestation already secondary, the link that unites the primitive ulcer with the

I shall not here speak of the influence it may exercise in modifying the form, or in diminishing the intensity; I merely treat here of the question of TIME. Well, it is certain that mercurials *retard* the manifestations of the diathesis. A symptom which, for example, would have appeared during the first months of the infection, had the patient been abandoned to himself, may only manifest itself at a far more distant period, if the specific medication has been employed;

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tertiary symptoms will not be absent in either case. Mr. Cullerier has even asserted, in a very remarkable memoir on the evolution of syphilis (Archives Gén. de Médecine, Décembre, 1844), that if the disease be not stopped and destroyed in its first period by a mercurial treatment, it invariably reappears *with the same order of succession in its symptoms;* or else, adds the eminent syphilograph, the mercury instantaneously cures all the manifestations, and shelters the patient from any constitutional affection; or else, if it does not cure, or rather *destroy* the syphilis, it allows it to *follow its natural phases.* A tertiary affection is always separated from chancre by an intervening symptom (cutaneous syphilis, ulceration of mucous membranes, &c.). In one word, according to Mr. Cullerier, there can exist neither a blank nor an interruption in the march of syphilis; and it would be contrary to observation, that a patient should pass with safety through the secondary period, and be affected with tertiary at a more distant epoch. Such, however, is not the opinion of our professor. According to Mr. Ricord, it may happen, as I have just remarked, that a patient who has passed unscathed through the secondary period, is later subjected to some more tardy manifestation. This is, no doubt, an exceptional case, a rare modification produced by the treatment in the normal evolution of syphilis; but it is not, as Mr. Cullerier has asserted, *utterly inconsistent* with clinical observation. What certainly would be erroneous, would be to admit that between the primitive ulceration and a constitutional manifestation of any kind or form there should exist no connecting link, no intermediate symptom; it would be to ignore the special lesion which necessarily separates the affection which gave origin to the consecutive symptoms,—I mean *the induration*, and the induration which manifests itself simultaneously at the base of the chancre and in the parenchyma of the glans. In one word (if I may be permitted to use a comparison often employed by our professor), *syphilis invariably follows induration.* With a chancre which is to infect the economy, we invariably find the indurated disk which subtends the primitive ulceration and the specific bubo already described. This is the *double* lesion which is *inevitably* present in syphilis; at all events, in all cases in which the affection has been *acquired.* With this exception, *no manifestation*, according to Mr. Ricord, *can be out of its order in the evolution of the diathesis.*—FOURNIER.

so that a lesion, secondary in form and character, will be developed at a time when you reckon the patient perfectly secure from any such *form* of manifestations. This would be a "*symptôme déclassé*," as it is called, and which would greatly compromise the doctrine of regular and methodic evolution, if we were not to keep account of the influence exercised by the treatment in modifying the march of the affection. But we have a still more singular derangement sometimes caused by the treatment. The same treatment which acts on the secondary affections in such a manner as to prevent their appearance, may be deprived of preventive qualities against other more tardy forms of syphilis, and allow non-equivocal tertiary characters to develop themselves during its application. Then this treatment being prematurely suspended, full play is given, so to say, to *secondary* manifestations, which break out after a certain time, that is to say, *consecutively to the lesions they ought to have preceded* in the regular order of development of the diathesis. I here terminate; for my task is accomplished, if the few examples which I have given, and which I might have multiplied, have made you understand that certain influences may modify the evolution of syphilis without affecting the laws which I announced on the regular succession of the symptoms and the time of their respective apparition.

VII.

HOW THE INFECTION RADIATES THROUGH THE ECONOMY—MODIFIED CHARACTER OF THE VIRUS INTRODUCED INTO THE SYSTEM—BLOOD OF SYPHILITIC PATIENTS—THE INOCULABLE VIRUS IS NOT TO BE DETECTED EITHER IN THE BLOOD, THE PHYSIOLOGICAL SECRETIONS, OR IN THE CONSTITUTIONAL AFFECTIONS OF SYPHILIS.

You will not fail to ask me how the infection radiates through the economy; what is the intermediate between the primitive ulcer and the tissues secondarily affected; in what manner the poison is conveyed to the various organs and

through the different tissues. I shall reply, that it is the same with syphilitic virus as with all other kinds of virus, of which we see the effects, without being able to follow the intimate phenomena of their invasion and of their radiation through the economy. We see them at work, we see the lesions they produce; but there our knowledge ends, and we are unable to penetrate further the mysteries of nature. It has been supposed, and justly, that the conveyance and the dissemination of the virus through the organs is effected, as Hunter has observed, by the fluid of the ordinary circulation. But neither inoculation nor analysis has demonstrated its presence in the blood of individuals affected with syphilis. It is a singular fact that the blood, which is evidently the vehicle of poison, and which is itself subjected to the influence of syphilis,* is *not contagious, and cannot communicate the disease to a healthy subject.*

* The blood is subjected to the influence of syphilis. This was asserted long ago by Messrs. Ricord and Grassi, who were the first to point out the decrease of the globular element in the blood of persons affected with syphilis. No document, however, containing more precise details upon this important subject has, up till now, been published in France. Through the kindness of Mr. Grassi, apothecary to the Hôtel Dieu, I have been furnished with the following note, containing the details of a few of the many experiments made on this subject. I may, however, remark that the results signalized by Messrs. Grassi and Ricord were obtained at a time when the division of the two chancres into several distinct nosological varieties had not yet been made. In performing these experiments, they were therefore entirely free from any doctrinal pre-occupations,—a circumstance which gives all the more value to the differences which will be found recorded further on, between the blood of patients affected with simple chancres and those affected with chancres of a contagious nature.

I.—STATE OF THE BLOOD IN PATIENTS AFFECTED WITH SIMPLE CHANCRES.

	1st patient.	2nd patient.	3rd patient.	4th patient.	5th patient.
Water	762.4	760.0	768.0	763.8	750.0
Fibrine	2.9	3.1	3.0	2.6	3.9
Albumen ..	94.3	97.0	88.5	95.5	112.5
Globules ..	140.4	139·9	140.5	138.1	133.6
	1000.0	1000.0	1000.0	1000·0	1000.0

For my part, I have never been able to discover inoculable pus in the blood *even in the veins nearest the chancre.* It would appear that, once mixed with the blood, the virulent pus is no

	6th patient.	7th patient.	8th patient.	9th patient.
Water	755.2	758.5	749.1	760.9
Fibrine	4.0	3.6	3.0	3.0
Albumen ..	113.7	84.3	109.9	97.0
Globules ..	127.1	153.6	138.0	139.1
	1000.0	1000.0	1000.0	1000.0

The high proportion of the globules in the majority of the preceding analyses will, no doubt, cause some surprise; but I must remark, 1st, that the more recent analyses of blood have raised considerably the proportion of globules above the number given by Messrs. Andral and Gavarret; according to Messrs. Becquerel and Rodier, they are 135; 2nd, that the experiments of Mr. Grassi were all performed on MEN, the most part in the prime of life. It is well known that the influence of sex is manifested by an increase in the number of globules in men, and a corresponding decrease in women. The mean number of globules in *men*, according to Messrs. Becquerel and Rodier, is 140 (*Traité de Chimie Pathologique*, p. 91). According to these indications, it would not appear that the numbers given by Mr. Grassi surpass to any great extent (with the exception of experiment No. 7) the mean physiological proportion of globules. There still remains the question of the albumen. The high proportions of this principle might cause some surprise, if Mr. Grassi had not taken care to observe, that in the preceding experiments the albumen was always estimated "en bloc" with the other elements of the blood, independently of the fibrine and globules. All things considered, it will be found that the preceding analyses do not reveal *any great alteration in patients affected with simple chancres.*

II.—STATE OF THE BLOOD IN PATIENTS AFFECTED WITH INDURATED CHANCRES.

	1st. *Indurated chancre.*		2nd. *Indurated chancre.*		
	1. Blood-letting.	2. Blood-letting.*	1. Blood-letting.	2. Blood-letting.†	3. Blood-letting ‡
Water	796.6	774.2	797.0	794.6	784.0
Fibrine ..	3.0	3.3	3.0	3.5	3.5
Albumen..	104.5	113.5	106.0	95.2	84.0
Globules ..	95.9	109.0	94.0	106.7	128.5
	1000.0	1000.0	1000.0	1000.0	1000.0

* After a month's treatment with the iodide of potassium.

† After eight days' treatment with the iodide of potassium.

‡ After a month's treatment with the iodide of potassium.

longer inoculable. We must, however, not be led astray by an affection of frequent occurrence in *men* affected with chancres on the glans or prepuce; I mean, those cordiform swellings on the dorsum penis commonly called *dorsal phlebites*

	3rd. *Indurated chancre.*		4th. *Indurated chancre; roseola.*	
	1. Blood-letting.	2. Blood-letting.*	1. Blood-letting.	2. Blood-letting.†
Water.....	797.3	768.6	769.7	765.0
Fibrine	2.4	2.4	2.6	3.5
Albumen ..	123.9	87.0	102.6	106.0
Globules....	76.4	142.0	125.1	125.5
	1000.0	1000.0	1000.0	1000.0

* After twenty days' treatment with the iodide of potassium.

† After twenty-five days' treatment with the proto-iodide of mercury.

	5th. *Indurated chancre.*		6th. *Indurated chancre.*		
	1. Blood-letting.	2. Blood-letting.*	1. Blood-letting.	2. Blood-letting.†	3. Blood-letting.‡
Water	769.5	784.4	789.5	768.7	796.9
Fibrine....	3.1	3.6	4.7	3.8	3.5
Albumen..	102.6	89.7	115.4	121.0	68.0
Globules ..	124.8	122.3	90.4	106,5	131·6
	1000.0	1000.0	1000.0	1000.0	1000.0

* After eight days' treatment with the proto-iodide of mercury.

† After nineteen days' treatment with iodide of potassium.

‡ After twenty-eight days' treatment with iodide of potassium.

"I might," says Mr. Grassi, "multiply almost indefinitely the examples which prove that in this affection *albumen increases, while the globules diminish.* The decrease of the globules may be considerable, as shown by the following three examples:—

	7th. *Indurated chancre; roseola.*		8th. *Indurated chancre.*	9th. *Indurated chancre; syphilitic maculæ.*
	1. Blood-letting.	2. Blood-letting.*		
Water	830.7	759.5	815.1	821.2
Fibrine ..	2.4	2.5	3.2	3.0
Albumen..	108.0	110.5	126.7	127.5
Globules..	58.0	127.5	55.0	48.3

* After twelve days' treatment.

of the penis. I have frequently been able to observe this symptom, and to ascertain that it was owing, not to a phlebitis, but to a simple inflamed lymphatic vessel. Now we know, by what has been said already, that the virulent pus may be

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In these last cases a "*bruit de souffle*" could be heard in the carotids. The existence of this sound was not at first suspected; it was only sought for subsequently, and on account of the indications furnished by the analysis.

From the experiments of Mr. Grassi the following two facts result:—that is to say, the influence of the syphilitic virus on the blood of infected patients is manifested, 1st, by a diminution in the quantity of the globules; 2nd, by an increase in the proportion of the albumen. The virus seems to have no influence on the fibrine. One observation of the highest importance is, that the patients who served for these experiments had all RECENTLY contracted the infection, and consequently were at a period in which the penetration of the virus into the economy, and its circulation through the system, reveals itself by the phenomena of chloro-anæmia, which we no longer meet with at a more advanced stage of syphilis,—weakness, lassitude, discoloration of the integuments, palpitations, headaches, &c. The preceding results must not, therefore, be regarded as representing the constitution of the blood of individuals affected with syphilis *in all the periods of the disease.* They are only applicable, and can only be applied, to the first stage of syphilis. When this is once passed, clinical observation, as well as analysis, demonstrates that the blood reassumes its normal composition. Let us also signalize, as an important result in these experiments, though extraneous to the present subject, the influence exercised by the iodide of potassium on the globular element of the blood: the rapid increase in the number of globules, determined by this medicament, must not be lost sight of in general therapeutics. According to the examples cited by Mr. Grassi, the proto-iodide of mercury would be far from producing the same beneficial effects on the blood. However, we all know that the preparations of mercury constitute the specific remedy for secondary syphilis, on which the iodide of potassium has but little effect.

If we now compare the results obtained by the analysis of the blood of individuals affected with syphilis with that of others affected with simple chancre, we shall be surprised to find the great difference that exists between them. In the first, the physiological proportions of the blood remain unaltered; in the second, its two most important constituents, the albumen and the globules, are modified, the one by increase, the other by diminution. In the simple chancre the blood remains pure; it is, on the contrary, completely vitiated in the indurated chancre. Is it not a singular fact to find chemistry thus aiding clinical observation, in distinguishing the two nosological kinds of chancre, which so many considerations tend to separate more and more?—FOURNIER.

found in the lymphatics. If we were to suppose, under such circumstances, that the abscess had been formed in a vein, we should be naturally led to admit the conveyance of the pus "*en nature*" into the current of the general circulation,—a supposition which, I repeat, is contrary to all clinical observation.* The virus is not only absent in the blood, but also in the liquids derived from the various physiological secretions, the perspiration, the saliva, the semen, the milk, etc.†

Besides, if you seek for it even in the secretions of *syphilitic origin*, that is to say, in the serosity or pus of a consecutive affection, whether secondary or tertiary, you will be equally unable to detect its presence. It was known in the time of Hunter, and, notwithstanding the efforts of contemporary "*confusionists*," it is still known, that the *constitutional*

* Hunter also expressed himself in the most positive terms on the absence of inoculability in the blood, as well as in the various secretions of patients affected with syphilis.—See Hunter, Part VI., chap. 1.

† See Hunter, Treatise on Syphilis, Part VI., chapter 1.—Dr. Venot, of Bordeaux, who has treated at length of the question of suckling by infected nurses, adduces, in the *Union Médicale* of the 8th of April, 1852, several cases which prove that women affected with syphilitic diathesis, presenting even secondary and tertiary affections, have suckled for a considerable length of time without communicating the disease to their foster-children. One of these nurses had *secondary ulcerations on the nipple.* Finally, in a lecture recently given on Congenital Syphilis, by Professor Trousseau, and contained in the *Union Médicale* of the 21st April, 1857, we find the following on the transmission of syphilis by suckling:—"Up to the time of Hunter, the fact of the *transmission by suckling* was generally admitted. A woman, affected with syphilis, suckling an infant, *necessarily infected it.* Hunter denied this, and his school adopted his way of thinking. Since the time of Hunter, there has been no well-authenticated case of the transmission of syphilis to an infant by means of its nurse's milk. I say, *by the milk*, as it would be absurd to believe that a nurse having a chancre on the nipple could not communicate the disease to the child she suckles. *A child, infected after birth, is infected by a chancre*, precisely in the same manner as an adult. I again repeat, that there *exists no authentic example of the transmission of syphilis by a nurse, to the child she suckles, through the medium of the milk.*"

*symptoms of syphilis do not produce a pus similar to that from whence they derived their origin.**

And, in fact, if you test with the lancet either of these suppurations, secondary or tertiary, not only will you not reproduce anything resembling chancre, but, moreover, your inoculation will remain *completely sterile*, both as to the origin of a local symptom, as well as the source of a constitutional infection. This is, gentlemen, the grand question of the non-inoculability of the consecutive affections of syphilis,—a question which has given rise in our times to so much dispute. It is not my intention to inquire into it at present, nor to discuss the different opinions to which this doctrine has given origin. I will only remind you, in reference to our present subject, of what you already know and have seen in our wards. The results of strict observations on this subject may be condensed in the two following propositions:—First, In all cases (and they are already numerous) in which inoculation of secondary or tertiary affections has been practised on healthy subjects,† *with the necessary precautions*, it has never

* See Hunter, Part VI., chap. 1.

† There exist already a considerable number of experiments on this important subject, performed by learned and devoted men, who have not feared to use the lancet on themselves. Dr. Sarrhos cites, in his thesis, several examples which may aptly be recorded here. Dr. Rattier, *who had never been affected with syphilis*, inoculated himself several times with the morbid secretion *derived from all the forms of secondary affections*, without being able to produce the slightest special symptom, although now (July, 1853) upwards of *fifteen years* have elapsed; so that those who admit a long incubation cannot in this case invoke, as an explanation favourable to their doctrine, the negative results of these experiments. Last year (1852), at the Hôpital de Lourcine, Mr. Cullerier, who had never been affected with syphilis, inoculated himself *a great number of times, and with impunity*, on the forearm, with the morbid secretion of secondary affections. We also, who have never been affected with syphilis, have, since the month of July, 1852, performed several experiments of this kind upon ourselves. We have, up till now, inoculated ourselves *about thirty times* with the secretion derived from various forms of secondary affections, diagnosed as such by Mr. Ricord, by his pupils, and by myself. These inoculations have remained

produced but *absolutely negative results.* It has never been known to reproduce either an ulceration analogous to the primitive ulcer, or a form of affection similar to that from which the pus employed in the experiment was taken.

Second, If the contagion, called physiological, seems at times to have belied this proposition, if the doubtful success of artificial inoculations of secondary affections on healthy subjects has been believed, the following proposition, at all events, cannot be attacked, and retains its entire integrity.

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sterile; and up to the month of June, 1853, in which we are penning these lines, we *have not been affected with any secondary symptom*, although we have not employed any means to prevent the manifestation of the diathesis.

The following are a few of the experiments referred to by Mr. Sarrhos, in his thesis (*Thèses de Paris*, 1853) :—

1. Secondary Ecthyma.—Inoculation on the forearm of Mr. Sarrhos, with the morbid secretion of this ecthyma. A slight inflammation is developed at the puncture, which completely disappears in a few days; no other affection.

2. Rupia.—A syphilitic patient, affected with a large rupia on the upper lip, covered by a thick scab, of a dark colour, and recently cracked. It was through a crack in this scab that the matter was obtained for inoculating, first, the *patient* himself; secondly, *a practitioner*, who had been affected with syphilis; and, thirdly, *myself.* I made *three inoculations* on myself, with a pin, at different depths, on the anterior surface of the forearm. *The result was negative on the patient, on the practitioner, who had been affected with syphilis, as well as on myself.*

3. Mucous tubercles.—Mr. Sarrhos inoculates himself with pus obtained from mucous tubercles of the anus. A slight redness is developed round the punctured spot; it disappears in a few days, without leaving any affection, whether local or general.

4. Mucous tubercles.—A similar inoculation with the morbid secretion derived from mucous tubercles on the anus. Slight inflammation, with itching; no other result.

5. Double inoculation with a morbid secretion of a syphilitic ulcer of the tonsils, and of a specific ulcer of the leg. Double negative result.

6. Syphilitic ulceration of the leg.—Mr. Sarrhos makes *six punctures* on his forearm, at various depths, using the morbid secretion derived from this ulceration, Slight inflammation caused by the traumatic action of the lancet; few days after, disappearance of the local symptoms.

And thus it was with twenty-four other experiments. I repeat, that these various inoculations were not followed by any symptom of syphilis. —Fournier.

"The inoculation of the morbid secretions of secondary or tertiary syphilis *on syphilitic subjects* is *invariably* sterile." Here the unsuccessful attempts must be counted, not by hundreds, but by thousands. How many lancets have put this doctrinal question to the test! Messrs. Cullerier and Puche at Paris, Messrs. Baumès and Diday at Lyons, Mr. Renault at Toulon, Mr. Lafon-Gouzy at Toulouse, Mr. Thiry at Brussels, Mr. Lindmann,* and many others, have all, after repeated and varied inoculations of the morbid secretions of constitutional syphilis, arrived at the same negative result. The demonstration is therefore as evident as it can be, and ought to satisfy the most incredulous. On this point the question is quite exhausted; and I have no doubt, that, for your part, the experiments you have this year witnessed in our wards have not left the slightest doubt in your minds respecting this important subject.†

* Mr. Lindmann, so celebrated for his experiments, has inoculated himself several thousand times with secondary and tertiary pus, and always without success. (Oral communication.)—A. F.

† I think it will not be uninteresting to those persons who have not attended Mr. Ricord's clinical lectures, to describe here these experiments, which I briefly extract from my notes. I must observe, that all the following inoculations were performed on the same patients to whom the pus used in the experiment belonged. The syphilitic pus was never conveyed from one subject to another, although by "*crossed*" inoculations of this kind the patient would not have incurred any danger.

1. Inoculation with the purulent serosity of a mucous tubercle of the anus. Negative result.

2. Inoculation of the pus of a mucous tubercle of the anus, hypertrophied, raised, vegetating, of about two months' date. Negative result.

3. Inoculation with the turbid serosity of a labial mucous aphtha, of about eight days' date; healing. Negative result.

4. Rupia.—Inoculation with the pus of a large ulceration of a rupial form, seated on the thigh. Negative result.

5. Inoculation with the pus of a mucous tubercle of the anus, of a few weeks' date. Negative result.

6. Inoculation with the purulent serosity of a labial mucous aphtha, dating one month. Negative result.

7. Ecthyma.—Inoculation with the purulent and viscid serosity obtained under the scab of an ecthyma on the arm. Negative result.

VIII.

THE SYPHILITIC DIATHESIS IS NEVER REPEATED—QUESTION OF THE RELAPSE OF THE INDURATED CHANCRE — CLINICAL OBSERVATION AND THEORY COMPARED — A CONSOLING HYPOTHESIS — CAN SYPHILIS BE CURED? — METHODIC INVESTIGATION OF THE RELAPSED INDURATED CHANCRE — MULTIPLICITY OF THE CAUSES OF ERROR — BORROWED INDURATIONS, ETC.

As the *indurated* chancre CREATES a *diathesis*, it must necessarily be subject to the law of virulent affections; that is to say, it must place the economy under an influence which does not allow the virus any longer to develope the same phenomena on infected patients. It is thus that

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8. Inoculation with the pus of a vegetating and prominent aphtha of the genito-crural region, suppurating abundantly. Negative result.

9. Inoculation with the pus of *mucous tubercle* of the anus, of a month's date. Negative result.

10. Rupia.—Inoculation with pus obtained under the scab of a rupia, seated on the dorsum of the foot. Negative result.

11. Inoculation with the milky serosity of an *aphtha* of the lip. Negative result.

12. Inoculation with the pus of an *anal tubercle*, of recent origin. Negative result.

13. Inoculation with the turbid serosity of a *labial aphtha*. Negative result.

14. Inoculation with the purulent serosity of a *labial aphtha*, ulcerating. Negative result.

15. Inoculation with the purulent serosity of a very recent *labial aphtha*. Negative result.

16. *Pustulo-crustaceous* syphilis. — Inoculation with the pus of this form of syphilis, obtained under a scab, slightly raised. Negative result.

17. Inoculation with *inflammatory pus* obtained from interdigital mucous tubercle, of six to eight days' date. Negative result.

18. Inoculation with the purulent serosity of a *labial aphtha*, in course of healing. Negative result.

19. Inoculation with the pus of an *anal tubercle*, hypertrophied and confluent. Negative result.

20. Inoculation with the pus of a *secondary balano-posthitis*, of ten to thirteen days' date. Negative result.

21. Inoculation with the turbid and semi-purulent serosity of a *labial aphtha*. Negative result.

22. Inoculation with the milky serosity of an ulcerated *labial aphtha*. Negative result.

vaccine deprives inoculated subjects of the faculty of undergoing a fresh inoculation, at least for a certain period, which it has been endeavoured to determine with precision; thus small pox is a preservative against small pox; thus also measles, scarlatina, &c., are not reproduced, with rare exceptions, on individuals who have once been affected with them. In one word, diatheses *are not reproduced* in a general manner. This law is so true, so generally accepted, that in those instances in which indisputable relapses have occurred, pathologists have preferred referring the cause of these exceptional cases to a kind of *morbid extinction of temperament*, rather than admit an accumulation and superabundance of diatheses. It is because it was supposed that the influence of the vaccine might, after a certain lapse of time, *become weakened and finally extinguish itself*, that a fresh

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23. Inoculation with the *inflammatory* pus derived from confluent interdigital *tubercle*. Negative result.

24. Inoculation with the pus of *tubercles* of the genito-crural region. Negative result.

25. Ecthyma.—Inoculation with the purulent serosity, thickened and viscid, of a secondary ecthyma of the leg. Negative result.

26. Inoculation with the pus of a *tubercle* of the scrotum, of several days' date. Negative result.

27. Inoculation with the pus of a *secondary balano-posthitis*, dating only from five to six days. Negative result.

28. Inoculation with the pus of a recent labial *aphtha*. Negative result.

29. Ulcerated tubercular affection of a serpiginous form. Negative result.

30. Inoculation with the purulent serosity of a *tubercle* of the scrotum. Negative result.

31. Inoculation with the purulent serosity of a *tubercle* of the scrotum, with a diphtheritic surface. Negative result.

32. Inoculation with the pus of a *tubercle* of the genito-crural region, of several days' date. Negative result.

33. Inoculation with the pus of scrotal *tubercle*, of recent origin. Negative result.

34. Inoculation with the purulent serosity of a recent *labial aphtha*. Negative result.

35. Inoculation with the inflammatory pus of a secondary *balano-posthitis*, of several days' date. Negative result.—FOURNIER.

preservative has been sought for by a subsequent inoculation of the virus. Now the same effect produced by vaccination on small pox, and of the greater part of virulent affections on affections similar to themselves, is produced by the indurated chancre for syphilis. In giving syphilis, it preserves against a fresh infection. In fact, it is a general, I might almost say absolute rule, that the indurated chancre is never produced more than once on the same individual. *The indurated chancre never relapses, and syphilitic diathesis is no more reproduced than any other kind of diathesis.* Let us question the numerous patients who crowd our consulting-room at the Midi; let us investigate carefully their antecedents, and I can foretell with certainty what will be the result of this statistic. We shall have to count by thousands the relapses for gonorrhœa, by hundreds for the simple chancre; but when we arrive at the relapses of the indurated chancre, I can foresee with certainty that the columns will be void. In fact, I have never met with a *single patient* on whom the infecting chancre manifested itself at two different periods, and *each time accompanied by the normal evolution of constitutional affections.* I do not know whether anybody has been more fortunate than myself. No doubt, a few straggling and not easily collected observations have been cited, and are still cited, in which the infecting chancre, with its specific induration, seems to have been produced at two different periods; but all these observations, as I have remarked already, are defective somewhere. In fact, it is of less consequence to prove that the chancres developed on the same individual may have, at different periods, for reasons which I shall investigate further on, assumed the characters peculiar to the indurated chancre, than to find well-authenticated cases in which syphilis has presented at two different periods its natural order of development,—in which it was truly "DOUBLÉE," both as regards the primitive affection as well as the subsequent manifestations.

Now, observations of this kind have not yet been met with. It is, therefore, *false* that *syphilis* can be *heaped on syphilis.* It is still more false that a first infection predisposes to a second. It is not that I deny the possibility of a relapse of an indurated chancre—far from it; *I firmly believe in it,* although unproved by clinical observation. In fact, the great laws of general pathology, which influence particular observation, demonstrate to us the extinction of diatheses, even of such as seem to influence most energetically the economy, as a case if not of frequent occurrence, at all events *possible.* It is thus that typhus fever, small pox, and various eruptive fevers *may* relapse; it is thus that the vaccine influence is weakened and extinguished after a certain lapse of time, giving way before the disturbing action of vital change, and that the success of re-vaccination demonstrates the former aptitude of the system. Why should the syphilitic diathesis alone resist those modifications which are inherent in our nature? Why should not the incessant vital change, in virtue of which molecules assimilated yesterday will be expelled to-morrow, expel from the system the virus of syphilis, and thus purge our blood of this fatal poison? Evidently the analogy compels us to suppose that the syphilitic influence may be extinguished, at all events in certain privileged individuals; and hence, *as it can be extinguished, so it may be reproduced.* Strict logic, therefore, allows us to admit the possibility of *relapses* in syphilis;* but if we quit the domain of analogy, if we abandon this all-consoling theory to consult only clinical observation, we shall find an absolute negation. Up till now, the syphilitic diathesis has never been reproduced, and the annals of science do not contain, *a single well-authenticated case of relapsed syphilis.*

* This doctrine has appeared new to some persons; it was considered to be a modification of the opinions which Mr. Ricord formerly professed. I, however, find the same idea in the following passage, extracted from a note that the Professor addressed to the authors of the *Compendium de Méde-*

For my part, I have ardently sought for these cases of relapses; for you can easily understand what an important conclusion might be drawn from such facts. If syphilis can be twice produced, it is because the influence of a first affection may be extinguished, a first diathesis exhausted. Syphilis could, therefore, be cured, and cured not only in its manifestations, but also in the morbid disposition with which it affects the constitution. Now, you all know that, up to this day, this terrible disease has been regarded as curable only in its *forms*, but indestructible in its *fundamental* nature. What a consolation it would be, gentlemen, to humanity, if we were able to announce that we had finally found the means of completely curing syphilis! Vidus Vidius, who said that syphilis accorded truces without ever making peace, (magis inducias facit quam pacem), Hunter (see Part VI. chap. 1), Mr. Cazenave,* and many others, think that the

cine, 1845. . . . . "Is the law of singularity of the diathesis absolute? Probably it is not. *We ought to find in the case of syphilis, though more rarely, what we find in vaccination.* The acquired disposition may become *weakened*, and finally *extinguished*. In the first case, a new general infection, having been rendered possible, will produce *modified* constitutional affections,—a circumstance which would explain the *syphiloid* affections admitted by some authors, and which would be to syphilis what '*varioloid*' is to small-pox. In this case, a fresh infection will give rise to the reproduction of constitutional affections having a regular form and succession." What difference exists, therefore, between the former language and the actual doctrine? —A. Fournier.

* Mr. Cazenave, in the clinical lectures which he delivered in 1856, expressed himself in the following terms:—"Can a patient affected with primitive syphilis be cured? Certainly he can: certain temperaments, that react energetically against the virus, may relieve themselves of it without the intervention of any treatment; and with others, by means of a rational treatment the same result may be obtained. Such is not the case with secondary syphilis, which cannot be cured. When once the syphilitic temperament is acquired, one must live as others live with a lymphatic temperament, &c. An individual thus affected may live for years, and, if no fresh manifestation is produced, he will be exactly in the same position as a man who had had an exaggerated lymphatic temperament, from the effects of which he had suffered during a certain time, and the morbid disposition of which had become dormant. This man seems to be no longer

diathesis, once established, can never be destroyed. For my part, although I have verified the truth of this melancholy assertion, yet I do not conclude from it that syphilis is absolutely incurable, although it has been asserted that I have said so. I ask myself why syphilis should not be cured, and only leave behind it, like small pox, a preservative modification? This is, in truth nothing more than an hypothesis, or rather a hope; for, till now, we have no instance of the extinction of the diathesis. On the contrary, there are numerous observations which prove that the morbid disposition may exist for a considerable lapse of time, and resist that continual movement of composition and decomposition by which the system is incessantly renovated. I might, for my part, without speaking of hereditary syphilis, cite to you examples of undoubted specific manifestations produced forty years after the primitive affection.*

In spite of the fearful tenacity of the diathesic influence (you must excuse my insisting on this all-important question), I still persist in not concluding from these melancholy facts that syphilis is surely and absolutely incurable. Also, gentlemen, I ask you to seek for facts which may throw some light on the definite prognosis of syphilis, and, above all things, to seek for them with due appreciation, and with that severity of diagnosis which the solution of one of the most

ill, but it could not be said what fresh symptoms might appear, and he would be continually threatened by them. Every day, at St. Louis, we find individuals, some of whom have undergone a complete course of treatment; others, none at all; who had been affected ten, twenty, thirty years previously with syphilis, and thought themselves cured, and in whom fresh symptoms, after this interval, had made their appearance."—*Moniteur des Hôpitaux*, 19th August, 1856.

* I remember an individual in whom the surgeons were anxious to extirpate a pretended cancerous tumour of the cheek. It was a gummy tumour, which disappeared by an anti-syphilitic treatment. This patient was in my wards in 1848 or 1849, and, with the exception of a chancre contracted in 1804, had had no other antecedents. It was, therefore, *forty years* after the primitive affection that fresh manifestations were produced. —Ricord, *Discours à l'Académie de Médecine*, 1853.

difficult problems of pathology requires. A thousand causes of error will present themselves before you in this laborious investigation. Allow me briefly to point out to you some of the most insidious. I shall not speak of those cases, unfortunately but too frequent, in which all your knowledge of the primary infection will be confined to the confused and often contradictory assertions of the patient himself. Moreover, would you accept medical testimony (*ab ore medico*) as a proof of a primary infection? But you must be aware that, for one practitioner, every venereal affection constitutes syphilis, gonorrhœa as well as vegetations, vegetations as well as the simple chancre; for another, no diagnosis can be established between a syphilitic eruption and that kind of eruption called "RÉSINEUSE," which follows the use of cubebs or copaiba; and so on with many other strange doctrines, against which you must ever be on your guard. Finally, let us suppose that *you yourselves*, with the ideas instilled into you at this school, be consulted at two different times by the same patient, and that on each of those two different occasions you thought you had recognised an indurated chancre. Let us see what causes of error may present themselves to you in this entirely exceptional case. Is the first infection quite certain? If followed by constitutional affections, no doubt can exist on this point; but if the chancre has been recognised, and that a mercurial treatment has *alone* been followed from its commencement, the certitude diminishes. It may happen, that the nature of the chancre, often so difficult to determine with precision, has been mistaken, and the treatment uselessly administered for a diathesis which never existed,—for affections which were not destined to be produced.

Another cause of error. An indurated chancre is produced, and after the lapse of some months or even years (for you all know the persistance of induration), another chancre manifests itself on the cicatrix of the former

one; the new-comer takes the base of its predecessor, so that under the actual ulceration you find the old induration. It is a simple chancre with a borrowed indurated base. See what a source of confusion! But, moreover, strict observation has proved that when a new chancre is produced on an old indurated cicatrix, it awakens, so to say, the specific infection which had given origin to the primitive swelling, and, if I may be permitted to use the expression, it exhumes, as it were, the primitive induration. To this you may add the complications which may arise. For example, let us suppose that each of the two chancres are followed by constitutional affections. Would you attribute these manifestations to both these chancres, as if they were two different sources of infection? For certain schools, a case of this kind would present no difficulty; according to them, each of the chancres was the origin of the symptoms by which it was followed. But you, who are stricter pathologists, would not certainly make such a singular division. In most cases the nature of the affections will give you the key to their veritable source; for the symptoms which you will see succeeding the second chancre will in general appertain, by their character, to a more advanced period of the diathesis,—to an *older* syphilis. But here we have another special condition which might create some doubt in your minds. Let us suppose that the two chancres were produced at a short interval from each other,—a year or two, for example; each is followed, after a few weeks, by those forms of superficial, erythematous eruptions which characterize the commencement of the diathesis. Does it not seem that between each of these chancres, and the eruption which accompanies it, there exists a relation of cause and effect? Nothing apparently is more likely, more acceptable. Here we have two equally contagious chancres, produced at an interval of one or two years from each other, and both followed by the special affections of the diathesis, in the classical order of

manifestation, with well-defined character of age and form; we have, therefore, here two superposed cases of syphilis. Well, no; we have here no superabundance,—it is simply a case of coincidence. The manifestations which *followed* the second chancre would have been equally produced *without it;* they were, in fact, but a consequence of the first one. You must know that in certain cases, which are not of rare occurrence, the precocious eruptions of syphilis relapse, whether treated or not, in the course of the first years; roseola may re-appear two or three times in the first fifteen, twenty, and twenty-five months; mucous tubercles may be reproduced even later, and often of rebellious nature. You will now understand that, if in this normal evolution of the diathesis a venereal affection of any kind manifests itself, such as a second chancre, it is nothing more than a coincidence, and has no action over the development of the phenomena. It is a superadded symptom, and nothing more. It is not a new source of infection, nor a second germ of diathesis. Here we have, no doubt, many causes of error, a wide field for erroneous diagnoses. And yet, gentlemen, I am far from having pointed out to you all the conditions which, on this point, are apt to lead astray even the most experienced practitioners.

IX.

WHAT DOES THE INSERTION OF THE PUS OF AN INDURATED CHANCRE PRODUCE ON SYPHILITIC SUBJECTS?—RESULTS OBTAINED BY THE LANCET—DIFFICULTY OF INOCULATION—CHARACTERS OF CHANCRE DEVELOPED UNDER THE SECONDITIONS—RESULTS FURNISHED BY INFECTION—TWO OBSERVATIONS OF CHANCRES, HAVING A SOFT BASE, DEVELOPED ON SYPHILITIC SUBJECTS, AND DERIVED FROM THE CONTAGION OF INDURATED CHANCRES.

The most rigorous observation has demonstrated that the indurated chancre does not relapse. But I foresee the question which arises in your mind. What will be pro-

duced when an individual, thoroughly affected with syphilis, comes into contact with an indurated chancre under circumstances favourable to contagion? To resolve this problem, we may invoke two orders of facts: those of artificial inoculation, and those of physiological contagion. Until lately, we were limited to the results furnished by the lancet, prejudging by analogy those that should be furnished by contagion. But now the recent investigations undertaken on the relation of form existing between the *original* symptoms and the *transmitted* symptoms allow us to examine both sides of the question. Well, let us commence by inoculation. We have here, for example, an individual affected with syphilis. He has contracted an indurated chancre, which has been followed by various unequivocal symptoms of constitutional syphilis. Under these circumstances, you inoculate him with the pus of an indurated chancre: what will be the result? One of these two things; either your inoculation will remain sterile, and give no result; or else a chancre with a soft base, analogous, at all events, in form and appearance to the simple chancre, will be produced. I shall explain myself, and develope this double proposition. Observation has shown that, in the majority of cases, inoculation effected with the pus of an infecting chancre on syphilitic individuals does not produce any result. The insertion of syphilitic pus on *syphilitic* patients produces but *rarely* the pustule and chancrous ulceration.* In general, these kinds of inoculations give rise to no other local phenomenon but a slight inflammation, produced partly by the traumatic influence of the lancet, and partly by the introduction, underneath the epidermis, of an irritating liquid; at most, this inflammation is accompanied, in some cases, by *false pustules*, which, however, disappear

* See Note VIII.

almost as soon as they are produced. But this is not always the case; for a *veritable chancre* may be developed. The characters of an ulceration produced under these entirely special conditions should be thoroughly appreciated. Now, attentive clinical observation has demonstrated the following fact:—that the chancre of inoculation, developed on syphilitic patients by the insertion of pus obtained from an indurated chancre, presents itself under the form of a *primitive ulceration, with a soft base,—an ulceration which is entirely analogous to the simple chancre* (as I have already said), *at all events, in its external characters.* And I further add, that if you follow this chancre through its various periods, from the time of its origin to that of its cicatrization, you will never be able, at any period, to feel under the base of the ulceration anything analogous to the specific induration of the infecting chancre. But this is not all: if you examine the glands corresponding to the region in which the chancre is developed, you will never find any alteration analogous to that which would have been developed by a primitive affection of a contagious nature; or, in other words, you will not find, with the chancre, either the specific pleïades or the hard and indolent adenopathy which invariably accompany an indurated ulcer. The absence of this double symptom (induration of the base and glandular hardness) distinguishes, in the most absolute manner, the ulceration thus produced by the inoculation of syphilitic pus on a diathesic patient, from the chancre which originates it by furnishing the pus by which it is developed. On the other hand, it resembles, at least in appearance and form, the *soft* variety of the primitive affection. Thus, gentlemen, renewed inoculation with the pus of an indurated chancre, on a syphilitic patient, does not produce a second indurated chancre; it developes nothing but an ulceration with a soft base. It has been attempted to establish that syphilis

may modify its own virus, whenever it affects for the second time a patient already contaminated; that, limiting itself in this renewed inoculation to a simple local effect, it transforms itself ON THE SPOT into a new morbid entity, capable of reproducing itself, and of propagating its species. In support of this theory, the example, as I have already stated, of small-pox or vaccine has been adduced, which modify themselves in "*varioloid*" or vaccinated individuals into fresh pathological types, which, like hybrid germs, assume an independent existence and special forms. In a word, the chancre resulting from the inoculation of an infecting chancre on a syphilitic patient has been said to be analogous to varioloid; hence the name of "CHANCROID" given to it by the author of this doctrine—our pupil and friend, Dr. Clerc.

Whatever may be the value of these theoretical views, the case is constant and generally accepted. The *induration*, no more than the diathesis, is never repeated in the same individual. A patient affected with syphilis may contract fresh chancres, but these chancres are never similar to the ulceration which occasioned the syphilis. This is the result of clinical observation, isolated from all the doctrinal interpretations it may receive. This result, gentlemen, we owe to inoculation, this powerful weapon which ever since the time of Hunter has opened to our science so many inaccessible roads. Let us now see whether the data which it furnishes conform with those which contagion teaches us. The difficulties inseparable from all investigations on contagion are still further increased and multiplied by the exactions of doctrinal questions. See, in fact, how many united conditions observations of this kind ought to present in order to elucidate the problem which we are now trying to solve. It will not be sufficient to find two individuals who have contracted syphilis the one from the other; but these two individuals must

moreover be subjected to certain special *conditions*. One of them, prior to the actual infection, must have experienced various unequivocal syphilitic affections; *the other, on the contrary, free from any suspicious antecedent,* must be actually affected with a well-defined indurated chancre. Also, gentlemen, it is rare to meet with an *infected couple* who present all these required conditions. And as the investigations on contagion, and the comparing of infected patients one with another, have only recently been undertaken, you will easily understand how scanty our knowledge must be of this subject. For my part, I have only, up till now, two cases to cite to you, which were observed this very year, and which Messrs. Fournier and Caby, who uphold this question of the contagion of chancre, were fortunate enough to meet with. These observations are the following:—One of my former patients, whom I had treated in this hospital during several months in 1843 for an indurated chancre, followed by constitutional symptoms (roseola, mucous aphthæ on the lips, posterior cervical adenopathy, alopecia, &c.), had connexion with a prostitute during the month of May, 1856. For at least *two months* prior to this, he had had no connexion with any woman. A few days after the coitus two chancres manifested themselves on the prepuce, one on the cutaneous, the other on the mucous surface of this organ. The patient did not follow any treatment during the first few days. When we examined him, the chancres were of about ten days' date; they were of the size of a half-franc piece; the base, far from being hard, was remarkably supple, and free from inflammatory thickening. The glands of the left groin were slightly tumefied and painful. The diagnosis could not be mistaken; they were truly *simple chancres,* at all events in their external characters—a restriction which I am never tired of repeating, and the importance of which you will presently see. These chancres cicatrized without casualties, under the

influence of simple dressings and aromatic wine. The adenites rapidly disappeared; no general medication was adopted. The patient, who has been carefully watched, has not experienced, up to this day, any new syphilitic affection. Whilst our patient was being treated at the Midi, my assistant was seeking, and was fortunate enough to find, the woman who had been pointed out to us as the source of the contagion. Now, do you know what this woman was affected with? A typical indurated chancre of the labium, with an enormous cartilaginous induration. This chancre, according to the patient, was of several weeks' date. It was accompanied by a well-defined specific adenopathy, and followed by constitutional affections. Thus we have here a syphilitic subject who contracts a chancre with a soft base, from a woman affected with indurated chancre. In other words, we have here the inoculation of an indurated chancre producing a soft chancre on an individual previously affected with syphilis. This case confirms what I have already said when speaking of the results of artificial inoculation.

Let us now pass on to the second observation. The girl L——, aged seventeen, was affected in June, 1856, with an *indurated chancre,* accompanied by an inguinal adenopathy, the glands being multiple, hard, and indolent. She followed the mercurial treatment only for a few weeks. In September, a confluent *roseola* covered her whole body; her hair began to fall off, and a double cervical adenopathy manifested itself.* The infection, therefore, could not be mistaken. During the latter days of the month of June, a former patient of mine, whom I had treated in 1842 for an infecting chancre, followed by constitutional affections, had connexion with the girl L——, and contracted two chancres of the penis; the one being seated on the frænum, the other on the prepuce. These two chancres presented not the slightest

* This patient was observed by Delamorlière, at St. Lazare.

induration, and their base remained supple. The inguinal glands were not in the least affected, and, although no specific medication was administered, no constitutional affection manifested itself.

This second case is analogous to the preceding one: we have a chancre with a soft base producing, on a syphilitic subject, the contagion of an indurated chancre.* Besides, remark this singular fact, which is not without its signification,—that in neither of these two cases do we find the chancres accompanied by the characteristic bubo, which, as you well know, inevitably follows a primitive affection of a contagious nature, and at the same time announces the chancrous induration, as well as the radiation of the virus through the system.

These two cases are not only similar to each other, but they agree also with the results obtained by experiment; so that by means of these two modes of investigation, inoculation and the comparing of patients, we finally arrive at results which, affording each other reciprocal support, allow us, with the utmost certainty, to establish the following law: —*the pus of an infecting chancre produces, on an organism previously infected, a chancre with a soft base, similar in appearance and form to the simple chancre.* But is this chancre

* Whilst making some investigations on this subject, I found in a thesis of Paris (1854) a very remarkable observation, which not only coincides with the two cases cited by Mr. Ricord, but still further confirms the doctrine promulgated by our Professor. The following is a brief account of this truly singular observation:—Two young men had connexion, on THE SAME DAY, with a woman affected with indurated chancre, and in whom manifestations of constitutional syphilis subsequently appeared. One of them was, at the time, affected with a former infection; he was, in fact, a syphilitic subject: he contracted with this woman a chancre with a soft base, which underwent the phagedænic deviation. The other, never previously affected with any syphilitic disease, contracted an indurated chancre, accompanied by characteristic glandular pleïades, and followed by the constitutional affections of syphilis. This case was observed by Dr. Maratray.—FOURNIER.

with a soft base, the hybrid product of a pre-existing diathesis and of an indurated chancre, analogous in its intimate nature, as well as in its external characters, to the *simple chancre* which I described to you at the commencement of these Lectures? Before answering this question, I must speak to you of the origin and transmission of the indurated chancre.

X.

OF THE CONTAGION OF INDURATED CHANCRE — THE OLD DOCTRINE — NEW INVESTIGATIONS — DISSENSIONS — NECESSITY OF RETURN TO OBSERVATION — NEW FACTS FROM THE HOPITAL DU MIDI — FIFTY-NINE EXAMPLES OF CONTAGION OF THE INDURATED CHANCRE.

You know, gentlemen, what were my former opinions on the transmission of chancre in general. I attributed the various forms assumed by the malady, the cause of infection or non-infection in general, to individual reactions depending on temperaments, constitutions, and idiosyncrasies. Considering the chancre as a single seed, I ascribed the differences in its manifestations to the nature of the soil. This was, in fact, the opinion of Hunter. "Experience," says the great master, "teaches us that *venereal pus presents no variety of species, and that no difference can be produced in the manifestation of the disease by a difference in the malignity of the purulent matter.* The same pus exercises on various individuals actions totally dissimilar from one another, *the diverse nature of which depends on the constitution and the general state of the economy at the time of infection.*" * I had adopted and had long maintained this doctrine; I must, however, confess that time and subsequent observations have now caused me to alter my former opinions. After having conceded too much to the modifying power of the soil, I have come to the conclusion that we must allow the seed its

* On Syphilitic Virus, chap. i.

share of influence. In other words, I am disposed to admit (without, however, absolutely affirming it) that a chancre assumes one form rather than another, not only on account of certain dispositions peculiar to the individual who contracts it, but also on account of the source from which it is derived. This analogy in the affections, presented by patients who had contracted the contagion the one from the other, I had long since remarked.* And, indeed, in a certain number of cases in which I had an opportunity of examining conjointly the infected couples, I invariably discovered a singular analogy of form between the symptoms of the infected patients and of those who had transmitted to them the infection. But as it so rarely happens, unless in certain special investigations, that we meet with patients under these conditions, and as it likewise rarely happens that we are enabled to determine with certainty the exact circumstances under which the contagion was originated, I did not attach any great importance to my first observations, nor did they at first arrest my attention; but subsequently syphilisation, like an epidemic, appeared, and showed me experimentally (a result very far from the aim and the intentions of *syphilisators*) this constant relation existing between the affection transmitted by means of the lancet, and the ulceration from which the pus used in the inoculation had been derived. The examples were then but too numerous; so that from that time I advanced this opinion, "that the different forms of the disease might depend not only on the conditions of the individual on whom the cause acts, but also on *differences in the causes and in the virus.*†

* It is probably to Bell we ought to attribute the honour of having been the first to signalize with precision the relation existing between the primitive and the transmitted affection. It was whilst treating of phagedænism that the celebrated surgeon of Edinburgh advanced this opinion *in extenso.*

† This opinion is to be found expressed almost in the same words in the letters of Mr. Ricord, Letter XXXIII.

The doctrinal interest which is attached to this question did not fail to provoke special investigations on the contagion, and on the propagation of chancre in each of its varieties. Mr. Bassereau, was amongst the first thus engaged, and you already know what were the results of his laborious investigations. Only, his object was more that of establishing a parallel of infection or immunity between individuals infected one by another, than to compare, *in their initial form*, the chancres of contaminated subjects. Thus an important part of the question has escaped his notice. But I shall reserve, for the present, this difficult and contested point: I shall return to it when describing the characters of the chancre, with a soft base, of syphilitic subjects.

Mr. Clerc admits, as well as Mr. Bassereau, the transmission of the infecting chancre in its own species, but I fear that the examples he has cited in support of his opinion are too scanty to convince his readers. The Lyons school has also made this question the object of its study. Messrs. Diday, Rodet, and Rollet are inclined to conclude, from the results of their personal experience, that each of the varieties of chancre is transmitted *separately* in its species.*

Up to this point the accordance is perfect. But there is at Marseilles one of my former pupils, now a distinguished surgeon in that city, who protests against this division of syphilis into two nosological species. Mr. Melchior Robert, a zealous champion of the *unity* of the virus, denies this *necessary* relation of the chancre with the chancre which produced it. According to him, the two species are often crossed; and, in fact, the different varieties of the primitive affection are simply to be considered "*as manifestations of a single principle, the various effects of which depend upon*

* The opinions of the school of Lyons have been reproduced by Mr. Ach. Dron, in a recent thesis of great interest.—*De Double Virus Syphilitique*, Paris, 1856.—FOURNIER.

conditions extraneous to the virus," and, consequently, to the infection.

In the midst of the dissentions which almost invariably attend questions so intricate and difficult as the one we are now discussing, I determined to recur again to observation, and to submit these various theories to a strict analysis of clinical facts. During the course of this year, a series of investigations have, therefore, been undertaken,—investigations already described, and the results of which, relative to the transmission of the simple chancre, are already known to you. I now only have to inform you concerning those relating to the infecting chancre. There are, as you all know, two different modes of studying the propagation of chancres; we can refer from the infected to the infecting subject, that is to say, re-unite the contaminated couples; or else, what is no less interesting as well as demonstrative, follow the transmission on several subjects whose infection is derived from the same source. We have viewed the question under this light, and here are the results of this double investigation:—Fifty-nine observations collected by my actual INTERNE,* and the greater part verified and confirmed either by yourselves and myself, or else by such of our colleagues as have aided us in our investigations, prove to us the similarity that exists between the affections developed on either side, in patients who receive and in those who transmit infection. In all those cases in which we have been able to refer to the origin of an indurated chancre, we have invariably found an affection of a similar nature; *at all events, whenever it was transmitted by a subject free from any anterior infection.* In all those cases in which we have followed the transmission of chancre on several patients who had derived the infection from the same source, we have always found the same affection on the different contaminated individuals; that is to

* See Note X.

say, an infecting chancre, followed by all the affections of constitutional syphilis. *This law of "relation"* is constant; no exception has been produced, nor has a single contradictory fact come to throw any doubt upon this new doctrine of the *transmission of the infecting chancre in its own species*. Some of these observations, which you have followed in my wards, are such as to *command* conviction: I shall briefly recall them.*

* Here are, in detail, the observations cited by M. Ricord;—the importance of the doctrinal questions attached to them will, I hope, compensate for their length.

Obs. I.—The girl P—— (Clemence) contracts a chancre towards the end of January, 1856. She almost immediately communicated it to two young men who shared her favours; D—— (Stephen) and V—— (Augustus). The father of the latter, an old man of seventy-three years of age, has connexion with this girl during the month of February. He also contracts a chancre. I have been able to obtain complete avowals from these four patients, and to follow in each of them the development of the disease, as follows:—

I.—P—— (Clemence), aged 23; robust constitution; sanguine temperament. First venereal affection, according to the patient. Towards the last days of January, perceived a large, hard, and ulcerated "*bouton*" on the left labium. This ulceration did not cicatrize until about the middle of April. Some time after the appearance of this (*pimple*, "*bouton*"), the glands of the left groin became enlarged. The patient followed no treatment. In the month of May, I found on her a brownish, rounded, and truly specific cicatrix, situated on the cutaneous surface of the left labium; the base of this cicatrix is still surrounded by a distinctly appreciable induration; bi-inguinal adenopathy, hard, multiple, and indolent, well defined on the left side, only slightly so on the right; mucous tubercles on the greater and lesser labia; erythematous roseola, disappearing; posterior cervical adenopathy.

II.—D. R—— (Stephen), aged 27; lymphatic temperament; no venereal antecedents. R—— had been cohabiting with the girl Clemence, without having had connexion with any other woman for a *month*; when, in the first week of February, he perceived a slight ulceration on his penis, at the level of the corona. From this time forward he abstained from coitus. The ulceration enlarged, but remained indolent. The patient did not present himself at the Midi until the month of March, when M. Ricord and myself recognised the following state:—Typical indurated chancre on the corona; bi-inguinal adenopathy, multiple, hard, and indolent, well defined on both groins. A mercurial treatment was immediately prescribed, but the patient only followed it for a few weeks. The 23rd of May he entered

The girl C——— contracts a chancre on the vulva, in January, 1856. This becomes indurated, and is accompanied

the Midi, in the following state:—Indurated cicatrix of the chancre; bi-inguinal adenopathy still persisting; confluent papular roseola, of several weeks' date; cephalæa; scabby eruption on the scalp; alopecia; bi-cervical adenopathy; mucous aphthæ in the pharynx. The mercurial treatment was followed, without any fresh casualty, from the 24th of May until the 10th of August. From this period I repeatedly saw the patient at the consulting-room of the Midi, and found on him successively, in September, mucous aphthæ on the lips; in October, labial and lingual aphthæ; finally, in December, ecthyma.

III.—V—— (Augustus), aged 20; lymphatic temperament. Gonorrhœa in 1855. Connexion with the girl Clemence in the last week of January; previous coitus dating the 1st of January. No subsequent coitus. The chancre was perceived by the patient in the first days of February. Treatment:—Lotions, with the decoction of marsh-mallow. In March, mercurial treatment prescribed by M. Ricord at the hospital. In May, actual state:—Indurated cicatrix of the chancre on the corona; bi-inquinal adenopathy, multiple, hard, and indolent; papular eruption, which first manifested itself a month ago; confluent buccal mucous aphthæ dating five weeks; alopecia; posterior cervical adenopathy; sore throat; cephalæa. Mercurial treatment; rapid cure of the affections. Up to the 25th of August, no fresh affection.

IV.—V——, aged 73 (father of the preceding patient). V—— had a single connexion with his son's mistress. For several years he had had no connexion with any woman. Some days after, a few pimples made their appearance on the inferior surface of the integuments covering the penis; these "*boutons*" were frequently covered with scabs, and were slow in cicatrizing. During the month of April, general cutaneous eruption; sore throat; cephalæa; violent ocular inflammation. No treatment. I did not see the patient until the month of May, when I found him as follows:—Total loss of strength; prostration; intellect sound; chancres parcheminés on the inferior surface of the penis, commencing to cicatrize; base clearly indurated; a few small glands, hard and indolent, in the groins; the adenopathy is, however, ill defined; confluent papular roseola of the trunk and members; mucous tubercles on the scrotum; mucous aphthæ of the amygdalæ; violent sore throat; ecthymatous eruption on the scalp; alopecia by handfuls on the parts of the head which time had respected; no cervical adenopathy; violent ophthalmia; eyeballs red, and greatly injected; vision almost lost. (The patient is in such a state of suffering, that I can no longer prolong this examination.) Died in the ensuing month.

Obs. II.—The girl P——, aged 19; lymphatic temperament; contracts in November, 1855, two chancres, with indurated bases, seated on the fourchette. These chancres, after the interval of a few days, are followed by bi-inguinal adenopathy, hard, multiple, and indolent. No specific treat-

by a bi-inguinal adenopathy, hard, multiple, and indolent. After the lapse of a few months, constitutional affections

ment. The chancres cicatrized but slowly, the girl having continued her life of debauchery. In December, erythematous roseola. 15th January, chancres persisting; specific bi-inguinal adenopathy; mucous aphthæ in the pharynx; alopecia. In February, chancres still persisting, but progressing favourably; labial mucous tubercles; mucous tubercles on the vulva. In May, chorea. (Observation communicated by M. Poisson, interne of the Hospitals.)

R—— (Emile), aged 24; bilious temperament. Venereal antecedents:—In 1851, several chancres, with suppurating bubo; treated by M. Ricord as simple chancres, that is to say, without mercurial medication. No subsequent affection. This young man had been cohabiting for several months with the girl P——, *without having had connexion with any other woman*, when in December, 1855, he contracted a chancre and gonorrhœa. This chancre was treated as *indurated*, by M. Clerc, who prescribed mercurial medication. In January, M. Ricord ordered this treatment to be continued. I did not see the patient until the 8th of April, when I found him in the following state:—Cicatrix of the chancre, without any induration; bi-inguinal adenopathy, multiple, hard, and indolent; papular roseola, dating several weeks; labial aphthæ; sore throat; secondary balanitis; scabby eruption on the scalp; posterior cervical adenopathy. Mercurial treatment followed till the first days of May. At the end of the same month, appearance of *confluent mucous tubercles on the anus*.

The 25th and 26th of January, the girl P—— had intercourse again with F—— and V——, who had had no intercourse with women, the former for six weeks, the latter for two months and a half. Both contracted chancres. Here is briefly their history:—

F——, aged 18, robust constitution; no previous venereal affection. Connexion with the girl P—— on the 25th of January; no subsequent coitus. On the 30th, M. Puche recognises several chancres, with *indurated bases*, seated on the prepuce and on the glans. In the following days the induration of the base becomes more apparent, and the inguinal glands become enlarged. The patient is received into M. Ricord's wards on the 22nd of April. Actual state:—*Three indurated chancres*, healing; specific bi-inguinal adenopathy, mucous aphthæ on the amygdalæ, sore throat, nocturnal cephalæa, rheumatoid pains, alopecia. Mercurial treatment. (The patient leaves the hospital prematurely.) In August, confluent mucous aphthæ on the penis and scrotum; hypertrophied mucous tubercles on the anus; confluent mucous aphthæ on the lips, the tongue, and isthmus faucium; scabby eruption on the scalp; confluent, well-defined cervical adenopathy.

V—— (Victor), 20 years of age; lymphatic temperament; feeble constitution. Gonorrhœa two years before, not followed by any affection. Connexion with the girl P—— on the 26th of January. Appearance of two chancres after the lapse of a few days; no consecutive coitus. These

manifest themselves; cervical adenopathy, roseola, mucous tubercles on the vulva, on the tongue, and lips. This girl, who lived with a man of the name of D. R——, communicates a chancre to him. This chancre, also, becomes *indurated*, and provokes the development of a specific inguinal adenopathy. Secondary affections then appear; roseola, alopecia, scabby eruptions on the scalp, posterior cervical adenopathy, labial mucous, aphthæ, &c. Nearly at the same time (January, 1856), the same girl has connexions with two other individuals, one a young man of 29, the other an old man of 73 years of age, father of the preceding one. Both these newcomers contract chancres; these chancres likewise become *indurated*, and are followed, at first, by specific adenopathy, and later by the following constitutional affections:—In the young man, papular eruption, alopecia, cervical adenopathy, cephalæa, sore throat, mucous aphthæ on the mouth. In the old man:—papular roseola, mucous aphthæ on the amygdalæ, mucous tubercles of the scrotum, ecthymatous eruption on the scalp, cephalæa. Thus, we have an *indurated* chancre, followed by general symptoms, which is transmitted to three individuals never previously affected, under the form of an *indurated chancre*, equally followed in these three patients by constitutional affections.

The following observation is no less convincing. The woman P—— contracts, in November, 1855, *indurated chancres*. Almost immediately after, a bi-inguinal adenopathy, with enlarged, hard, and indolent glands, manifests itself. Then, according to the general rule, a series of constitutional affections appear in the following months:—

chancres were at first treated by M. Puche, who prescribed the mercurial treatment. I did not see the patient until some days after M. Puche, at the consultation, when I found him in the following state:—Indurated chancres on the corona, bi-inguinal adenopathy, multiple, hard, and indolent. April 16th, confluent erythematous roseola. May 12th, buccal mucous aphthæ, posterior cervical adenopathy, cephalæa, pains in the substernal region.—Fournier.

roseola, mucous tubercles, alopecia, posterior cervical adenopathy, specific sore throat; and finally, chorea, probably of a syphilitic nature. In December, this same woman communicates a chancre to her lover R———, who, it appears, had been affected several years before with simple chancres, which had not been followed by any symptom of syphilis. The new chancre becomes *indurated*, and the patient is received into the Midi with the following affections:—papular roseola, labial and lingual mucous aphthæ, secondary balanitis, scabby eruption of the scalp, bicervical adenopathy, specific sore throat.

But this is not all. On the 25th and 26th of January, the same woman distributed her dangerous favours on F—— and V——, both of whom, up to that time, had never been affected with syphilis. The following is the result of these connexions. F—— contracts three *indurated chancres*, accompanied by a double specific inguinal bubo. These chancres are succeeded, in the usual time, by the following constitutional manifestations:—papular roseola; mucous tubercles on the anus, scrotum, and mouth; sore throat, confluent scabby eruption of the scalp, alopecia, well-defined cervical adenopathy, nocturnal rheumatoid pains, &c. V—— likewise contracted indurated chancres, accompanied by a specific bi-inguinal adenopathy. After the lapse of a few months, the syphilis became confirmed by the manifestation of constitutional affections,—roseola, mucous aphthæ in the mouth, cephalæa, substernal pains, &c.

Here is another singular observation. My interne was fortunate enough to observe six individuals, who had contracted the infection from the same source, and this under circumstances which rendered the identical origin of the infection beyond a doubt. The woman, it is true, escaped us, but we were able to study the relation of the affections upon her six victims. Here, as elsewhere, we find the identity of origin indicated by the identity of the primitive symp-

toms and consecutive manifestations. In fact, listen to what we observed on each of these patients.*

On the first (we have taken care to classify them in the chronological order of contagion), *two indurated chancres* on the corona; specific bi-inguinal adenopathy, multiple and

* Observation.—Six individuals infected by the same woman; same form of primitive affection and constitutional infection manifested in these different patients. In the course of a few months, eight individuals affected with indurated chancres, followed by constitutional affections, were admitted into the Midi, who had derived the infection from the same woman. Of the eight patients, there were six in whom the origin of the infection was beyond a doubt, as will be seen further on. The other two had to be excluded, and I shall only say a word about them in terminating.

Here is what I was able to verify on the patients of the Midi:—

1. J. D—— (Henri), aged 18; lymphatic temperament; feeble constitution; no venereal antecedent. Connexion with the girl Blanche about the 20th of June; former connexion dating a year back; *no subsequent connexion*. Two chancres appeared a few days afterwards. Treatment, simple emollients. Actual state, 12th of August:—Two indurated chancres on the corona; bi-inguinal adenopathy, hard, indolent, and multiple, well defined on both groins. Mercurial treatment continued during two months, without casualty. The patient quits the hospital, and we only see him at the consultation, where we recognise, on the 27*th of October*, confluent erythematous roseola; *mucous aphthæ* on the amygdalæ; secondary balanitis; cervical adenopathy. On the 17*th of November*, buccal mucous aphthæ; cephalæa. Finally, the 1*st of December*, mucous tubercles on the prepuce and glans.

2. F—— (Francis), aged 30; robust constitution. Two preceding attacks of gonorrhœa, the last of which occurred two years ago; no consecutive manifestation. Connexions with the girl Blanche during the latter days of June; previous coitus dating six weeks back; no subsequent coitus. Appearance of a chancre on the prepuce in the first days of July. No treatment. Actual state, 15th July:—Indurated chancre on the mucous surface of the prepuce; bi-inguinal adenopathy, multiple, hard, and indolent, well defined. Mercurial treatment. 27th of August, papular roseola, which, according to the patient, first appeared about ten days previous to this date. 15th, *buccal mucous aphthæ*.

3. G—— (Leon), aged 20; lymphatic temperament, feeble constitution; venereal antecedent. Connexion with the girl Blanche towards the middle of June; previous coitus dating four weeks at least; no consecutive coitus. The chancre was recognised a few days after the infecting coitus, and treated almost immediately by M. Cullerier as an indurated chancre, at the consultation of the Midi. In August, I find an indurated chancre

indolent; erythematous roseola; mucous tubercles on the glans and prepuce; mucous aphthæ on the amygdalæ, posterior cervical adenopathy, cephalæa. On the second, indurated chancre on the prepuce; bi-inguinal adenopathy,

seated on the left side of the corona; left inguinal adenopathy, multiple, hard, and indolent. In September, erythematous roseola; cervical adenopathy.

4. M—— (James), aged 27; sanguine and robust; no venereal antecedent. Connexions with the girl Blanche during the month of June; previous coitus dating five months back; no consecutive coitus. Chancre recognised by the patient a few days after the infecting coitus; no treatment. August 20th, chancre "PAREHEMINÉ" on the mucous surface of the prepuce; indurated dorsal lymphangitis; bi-inguinal adenopathy, hard, multiple, and indolent. Mercurial treatment continued, without casualty, up to the month of October. In December, *buccal mucous aphthæ;* scabby eruption on the scalp; cephalæa of several weeks' date.

5. G—— (Nicholas), aged 24; lymphatic temperament; no venereal antecedent. Connexions with the girl Blanche in June, previous coitus dating two months back; no consecutive coitus. Five days after the infecting coitus, tumefaction of the prepuce; appearance of an œdematous phymosis, with an abundant purulent discharge. Treatment, astringent injections between the glans and prepuce. The patient is only able to draw back the prepuce, four or five weeks after the commencement of the disease. Actual state, August 4th:—*Two indurated chancres* on the prepuce, situated on the left side; left inguinal adenopathy, hard and indolent. Treatment: dry lint, liquor of Van Sweiten. In September, slight roseola; scabby eruption on the scalp. In December, labial mucous aphthæ.

6. G—— (Peter), aged 31; bilious temperament; no venereal antecedent. Connexion, in June, with the girl Blanche; anterior coitus dating at least a month back; no subsequent coitus. The chancre appeared a few days after the infecting coitus, and was treated with ointments.

August: large indurated chancre on the frænum; bi-inguinal adenopathy, multiple, hard, and indolent, extremely well defined. Mercurial treatment regularly followed. In October and November, papulo-squamous eruptions of the trunk; palmar and plantar psoriasis; impetiginous eruption on the chin, the nose, and scalp; confluent mucous aphthæ on the amygdalæ; posterior cervical adenopathy; mastoidean and submaxillary adenopathy; cephalæa.

Two other patients at the Midi, who had had connexion with the girl Blanche, likewise presented indurated chancres, followed by constitutional syphilis. But these two patients had had connexion with other women, one ten days, and the other twelve days, before the supposed infecting coitus; so that the origin of the contagion was doubtful. I shall not, therefore, cite the observations, as they cannot strictly be the means of solving the actual problem—*the contagion of chancre.*—FOURNIER.

multiple, hard, and indolent; roseola, mucous tubercles. On the third, who was treated by my colleague, M. Cullerier, an *indurated chancre* on the corona, specific bubo, roseola, posterior cervical adenopathy. On the fourth, an indurated chancre on the prepuce, dorsal lymphangitis of the penis; indurated, bi-inguinal adenopathy, multiple, hard, and indolent; buccal mucous aphthæ, scabby eruption on the scalp, cephalæa. On the fifth, *two indurated chancres on the prepuce;* inguinal adenopathy, hard and indolent; roseola, buccal mucous aphthæ. Finally, on the sixth, large *indurated chancre* on the frænum; specific bi-inguinal adenopathy, well defined; papulo-squamous eruption on the trunk, palmar and plantar psoriasis, impetiginous syphilidis on the face and scalp, mucous aphthæ, cephalæa, cervical adenopathy, &c.

And so on, gentlemen, with many other observations which you have witnessed in these wards, and which it would be superfluous to repeat. Thus, in all the cases collected this year, as well as in all those that I remember, an indurated chancre has always originated (in healthy individuals, let it be understood) a chancre of the same nature as itself, and under these conditions syphilis has invariably been developed on either side. This is a fact which is now completely established by clinical observation.

XI.

CAN A SYPHILITIC INDIVIDUAL, CONTRACTING A NEW CHANCRE, TRANSMIT SYPHILIS?—FORMER DOCTRINE—OBSERVATIONS OF MESSRS. CULLERIER AND MELCHIOR ROBERT—FOUR NEW CASES AT THE CLINIC OF THE MIDI, SHOWING THE TRANSMISSION OF THE "CHANCROID" OF M. CLERC UNDER THE FORM OF AN INFECTING CHANCRE—QUESTION OF THE ORIGIN OF THE CHANCRE WITH A SOFT BASE, CAPABLE OF REPRODUCING AN INDURATED CHANCRE—HYPOTHESIS—BRIEF ACCOUNT OF THE MOST RECENT INVESTIGATIONS ON CONTAGION.

I have now proved to you, gentlemen, that the infecting chancre always transmits itself in its species, in individuals

who have never been previously affected with syphilis. This being admitted, let us now see whether the indurated chancre can only derive its origin from a chancre of the same form, if it cannot be produced by a chancre appertaining to another variety of the primitive affection. Here a new point of doctrine arises. No doubt that the simple chancre, developed on a *virgin* subject, may, as we have already noticed, reproduce a simple chancre not followed by the constitutional symptoms of syphilis. But is this the case with the chancre with a soft base, developed on a syphilitic subject, and deriving its origin from an indurated chancre? This, gentlemen, is the delicate question we now have to discuss. Allow me to render, by an example, this proposition more intelligible. A syphilitic subject, undergoing the influence of the diathesis, contracts a new chancre from a woman affected with indurated chancre. In virtue of the unity of the diathesis, this chancre remains *soft*, and *retains the appearance* of a simple chancre. What will be the consequence of its being transmitted to a third subject free from any syphilitic affection? Will it propagate itself in the species to which it belongs by its APPARENT FORM, that is to say, as a simple chancre, or will it retain the infecting property due to its origin? I long supposed that a chancre must necessarily transmit itself in the form in which, under an influence of any kind, it had definitively appeared. Thus, I thought that a chancre developed on a syphilitic subject, whatever might be its origin, must always transmit a simple chancre; this is, at all events, the doctrine which has lately been reproduced and developed by M. Clerc. For my part, this belief is at most an hypothesis; for the difficulty of collecting complete and convincing facts upon this point has always caused me to withhold my opinion. See, in fact, how many united conditions observations of this kind demand. It requires, 1st, a subject previously infected, and exposed to a fresh contagion; 2nd, the source of the second contagion

must be an indurated chancre; 3rd, the second subject to whom the chancre is transmitted must be free from any previous infection. Judge whether we often meet with all these united elements at the same time, especially under conditions which allow us to follow step by step the progress of the affection. But in the absence of observations of this kind, which are almost impossible to find, there is a less complicated question which may help us to solve the problem which at present is the object of our study; it is the following:—Can a syphilitic subject, affected with a fresh chancre, transmit *syphilis* to a healthy subject? Can this fresh chancre, this "*chancroid*," as Dr. Clerc calls it, become the origin of an indurated chancre? Recent observations seem to establish that a chancre with a soft base, developed on a subject previously infected, may sometimes transmit to a healthy subject a chancre which indurates and becomes the origin of constitutional infection. M. Cullerier has communicated to us the following observation:—A young man contracts an indurated chancre, and undergoes a series of constitutional affections. After the lapse of several years, he contracts a fresh chancre, the base of which remains absolutely soft and deprived of specific induration. He marries, though still affected with this chancre, which he almost immediately afterwards communicates to his wife. The woman's chancre indurates, is accompanied by specific adenopathy, and followed, after the lapse of a few months, by symptoms of constitutional syphilis, general papulo-tubercular eruptions, alopecia, impetigo of the scalp, and later still, by tertiary affections.*

* The following are the words of M. Cullerier:—"A young man is affected with an indurated chancre, which is followed by constitutional symptoms; a certain treatment is followed, and everything disappears. After the lapse of a few years, he once more contracts a chancre, which retains the simple form, without producing any effect on the economy. The patient, who imagined that it was impossible to be twice affected with syphilis, did not attach any importance to the ulceration, and did not

Here therefore there is no room for doubt; it is the chancre with a soft base, the "*chancroid*" of a syphilitic subject, which is transmitted to a woman free from previous infection, under the form of an indurated chancre, and followed by syphilis. Dr. Melchior Robert has inserted, in a recent thesis of a student of Lyons,* three observations analogous to the preceding one, which equally demonstrate the possibility of a constitutional infection being developed in virgin subjects by the contagion of soft chancres derived from syphilitic subjects.

Finally, MM. Fournier and Caby have lately collected, under our eyes, the four following observations, which still further confirm the same fact.†

hesitate to marry, without ever having consulted a surgeon. The young woman, as will be easily conceived, was herself soon affected with a chancre, which, however, became indurated, complicated with glandular tumefactions, and finally followed, in the usual time, by general papulo-tubercular eruptions, alopecia, impetigo of the scalp, and later by tertiary affections (Société de Chirurgie, 1853). In the eyes of M. Cullerier, this case would be "a powerful argument against the idea of the DUALITY of the syphilitic virus." We shall presently see that M. Ricord gives a totally different interpretation to this case, as well as to other similar observations cited further on.—A. F.

* Du double Virus syphilitique, par Aeh. Dron, interne des Hôpitaux de Lyon.

† The following are the observations referred to:—

Obs. I.—N—— (Marie), aged 17; common prostitute; sanguine temperament. This girl has been retained six times at St. Lazare, since 1855, for venereal affections, viz.:—May, 1855, vulvitis, granular vaginitis, purulent uterine catarrh. November, 1855, indurated chancre, bi-inguinal adenopathy; the glands being multiple, hard, and indolent. February, 1856, *mucous tubercles* on the vulva and anus; persisting inguinal adenopathy; posterior cervical adenopathy; alopecia. March, 1856, simple chancre, with a soft base, on the nymphæ. May 24th, sore throat; ulcerations of the amygdalæ and of the velum pendulum palati. Exit from the hospital June 11th. On the 17th of June, the same girl returns to St. Lazare, having a chancre with a soft base, situated on the fourchette, without glandular complication. Cauterization. The mouth, the genital organs, the anus, having been examined with care, do not present, at this period, the slightest trace of other syphilitic affections. Eight days after (25th June), development of fresh mucous tubercles on the vulva. Cau-

The first case is that of the girl N——, who contracts, in November, 1855, an *indurated chancre.* This girl is soon

terization; mercurial treatment. Exit from St. Lazare 1st July. It was during the short interval that this girl was out of the hospital (from the 4th to the 17th of June) that she contracted a fresh chancre, and communicated it to our patient, whose history is the following :—

R—— (Louis), aged 23; robust constitution; sanguine temperament. Antecedents :—gonorrhœa in 1855; no chancres; connexion with the girl N—— (Marie) on the 15th of June; previous coitus dating at least six weeks back; no consecutive coitus. The 18th and 19th of June, commencement of a gonorrhœa; two days later, development of two small ulcerations on the upper lip, near the mesial line; these ulcerations continued to enlarge, and the patient remarked that they became hardened within a few days. No treatment. Actual state, 11th July :—Double indurated chancre on the upper lip, resting on an extremely hard cartilaginous base. (Connexion *ab ore*, confessed by the patient.) These two chancres are situated near the mesial line, the right one being by far the largest; submaxillary adenopathy of the right side, dating, according to the patient, from about a fortuight, and only painful within the last few days; a hard and indolent gland in the left maxillary region; simple gonorrhœa; no induration in urethra; no inguinal adenopathy. Treatment :—Cerate of opium; one pill of the proto-iodide; cubebs and astringent injections. Three successive inoculations with the pus of the labial chancres; triple negative result. 21st, the chancres are healing; the submaxillary bubo of the right side has become greatly developed, and exceedingly painful; slight redness of the skin in this region; poultices. 28th, resolution of the adenitis. From the 2nd to the 8th of August, development of an erythematous roseola, already passing, in some points, to the papular state; headaches towards evening; scabby eruption on the sealp; chancres healed; two pills of the proto-iodide. The patient voluntarily quits the hospital. He re-enters the Midi on the 23rd of September, not having followed any treatment since the time he left it. Actual state, 23rd September :—Indurated cicatrices of the two chancres; submaxillary adenopathy persisting on both sides; papular eruptions; mucous tubercles on the anus; interdigital tubercles on the feet; alopecia; scabs ou the sealp; posterior cervical adenopathy. I discover, besides, a slight development of the inguinal glands, constituting indolent pleïades; the epitrochlean glands hard and indolent. Mercurial treatment; chlorine lotions; steam baths. Rapid cure of the mucous tubercles. Disappearance of the eruptions in the first fortnight of October. Exit from the hospital 21st of October.

Obs. II.—The girl J—— (Marie), aged 23; entered several times the hospital of St. Lazare, for affections of constitutional syphilis; papular eruptions; multiple mucous tubercles; cervical adenopathy; alopecia almost complete, the head being bare. She once more re-enters the infirmary on the

after affected with secondary manifestations, which oblige her to enter, on several occasions, the Infirmary of St. Lazare;

21st of October. (Strong constitution, bilious temperament.) We recognise, at this period, a chancre with a soft base, situated among the caruncule of the right side. *Not the slightest trace of other syphilitic affections, either on the genital organs or on the anus.* Cauterization; dry lint. Rapid cure.

R—— (Theodore), aged 19; lymphatic temperament. Antecedents:—Simple gonorrhœa in 1854; no chancres. Connexion with the girl J—— (Marie) during the latter days of October; previous coitus dating two months back; no consecutive coitus. Chancre developed after the lapse of a few days. Treatment:—lotions and pills of some kind. Actual state, 4th of November:—Indurated chancre on the prepuce; bi-inguinal adenopathy, hard, multiple, and indolent. Treatment, mercurial. Consecutive affections. In December, roseola, posterior cervical adenopathy, sore throat.

Obs. III. (I shall describe this observation briefly, as it is completely analogous to the previous one.)

A—— (Geneviève), aged 20; sanguine temperament. This girl has several times been treated, at St. Lazare, for affections of constitutional syphilis (eruptions; ulcerated mucous tubercles on the vulva, round the anus, on the amygdalæ, and velum pendulum; inguinal pleïades; posterior cervical adenopathy; scabby eruption on the scalp; alopecia). She again re-enters the infirmary, on the 23rd of October, with a well-defined chancre with a soft base. *Not the least trace, at this period, of other syphilitic affections, either on the genital organs or on the mouth.* In January, 1857, fresh manifestation of the pre-existing diathesis (mucous tubercles on the vulva, &c.)

A—— (Louis), aged 21; lymphatic temperament. Antecedents:—simple gonorrhœa in 1852; no chancres; habitual intercourse with the girl A—— (Geneviève) since the month of September; this young man has not been with any other woman for several months. *Labial chancre*, the origin of which would date from about the 20th of October, according to the recollections of the patient (avowal of the connexions *ab ore*); gonorrhœa dating from the same period. No treatment. Actual state 19th December:—Chancre "PARCHEMINÉ" on the lower lip, near the right commissure; right submaxillary bubo, large, indolent, during the first few days, but since a week, painful; congenital phymosis; purulent discharge around the glans penis. Impossibility of a more complete exploration. Negative inoculation practised with the pus of the labial chancre; consecutive affections. In the latter days of December, erythematous *roseola*; cervical adenopathy commencing.

Obs. IV.—M—— (Peter), aged 21; very robust constitution; sanguine temperament; no venereal antecedent. Connexions with the girl G—— during the last week of October; no previous connexion for six months back. A few days after, and without any subsequent connexion, a

viz., mucous tubercles on the vulva and anus in February, 1856; three months later, mucous aphthæ on the amygdalæ and velum pendulum palati, &c. During the first fortnight of June, this same girl contracts a fresh chancre. This chancre, which was seen and treated at St. Lazare, manifested itself with a *perfectly soft base, and without affecting the glands.* On the 15th of June she conceded her dangerous favours to R——, who up to that time had been exempt from any syphilitic affection. R—— at this period was in perfect health, and had had no connexion with any woman for at least six weeks. On the 18th, a gonorrhœa manifested itself; two or three days after, two small pimples, resting on a hardened and tumefied base, made their appearance on the upper lip. These "pimples," the origin of which the patient did not dissimulate, rapidly extended, and in a few weeks we were able to recognise two indurated chancres of the upper lip, accompanied by specific submaxillary adenopathy. In August, his whole body was covered by a papular eruption. In September, mucous tubercles appeared on the anus and toes. This first case surprised, without con-

chancre appeared on the prepuce; no treatment. Actual state, November 10th:—Typical chancre *parcheminé* on the mucous surface of the prepuce; bi-inguinal adenopathy; glands multiple, hard, and indolent. Mercurial treatment; consecutive affections. December 23rd, confluent *erythematous roseola;* mucous aphthæ on the amygdalæ and velum pendulum palati; sore throat; scabby eruption on the scalp; posterior cervical adenopathy; rheumatoid pains.

The girl G—— (Caroline), aged 22, lymphatic temperament, from whom our patient had contracted the infection, was examined on the 4th of November. She presented a large chancre with a soft base. (*No other syphilitic affection at this period.*) Since January, 1856, this girl had been sent three times to St. Lazare; in January she had been affected with indurated chancres on the vulva, with characteristic inguinal plcïades, followed soon after by constitutional affections (papulo-squamous eruption; mucous tubercles on the vulva; alopecia). Since that period, she had twice entered St. Lazare, for chancres with a soft base; and each time the persisting influence of the diathesis was recognised. Whilst correcting the printer's sheets of this volume, I have been informed that this girl has been sent, for the fifth time, to St. Lazare, for fresh manifestations of constitutional syphilis.—FOURNIER.

vincing us; for it offered a particularity on which our opinion is not yet decided. I mean, the *seat* of the affection on the cephalic region, where, as you well know, no authenticated instance of a simple chancre has up to this day been met with. But this case was succeeded by others. One of the patients now in our wards has an *indurated chancre* on the prepuce, the *type* of an infecting chancre, accompanied, as usual, by that characteristic adenopathy of which I have so often spoken to you.* He contracted this chancre from a prostitute actually affected with a chancre with a soft base. Now, this girl, prior to this last affection, had been treated on several occasions for multiple symptoms of well-defined constitutional syphilis. This second case, exempt from the exceptional particularities attending the preceding one, attracted our attention. It was soon followed by other analogous cases, which fully confirmed it. I shall only signalize to you an indurated chancre of the lip, transmitted by a syphilitic woman affected with a fresh chancre with a soft base. This third observation is entirely similar to the first one cited. I prefer calling your attention to the following fact. One of the patients now in our wards had had no connexions with any woman for six months, when he had intercourse, in the latter days of October, with a prostitute. He contracted an *indurated chancre*, the origin of a syphilis which has been confirmed within the last few days by the apparition of a splended *roseola*. The girl from whom he had contracted the contagion was examined almost immediately after; she presented a large soft chancre in the fossa navicularis. Now, from exact information obtained by my interne, it appears that this girl has been sent four times to St. Lazare since the month of January, 1856; the first time for a typical *indurated chancre*, followed by well-defined constitutional

* This patient was affected, in December, with constitutional affections. Vide Obs. II.

affections, and the two following times for simple chancres. I must add that, each time she was in the hospital, the existence of the syphilitic infection was recognised by unequivocal symptoms.*

You see, gentlemen, that these facts agree, and cannot leave any doubt on the infecting character that the chancre with a soft base can, under certain circumstances, assume when developed on a previously infected individual. It therefore now seems proved, contrary to former doctrines, that a *syphilitic subject*, who contracts a fresh chancre, may transmit the syphilis. I need not add, that if these facts be confirmed by ulterior observation, they will completely overthrow the doctrine which our laborious pupil, M. Clere, has attempted to promulgate.

We now, gentlemen, have to elucidate the following question which I submit to your consideration:—Does the soft chancre of a syphilitic patient, which is capable of transmitting syphilis to a healthy subject, necessarily derive its origin from an indurated chancre? Or does some special though still *unknown condition* exist which invests the soft chancre, developed under these conditions, and *whatever may be its origin*, with the infecting character, which only appertains to the indurated chancre? This latter hypothesis does not seem to me very probable, and I dislike admitting it; for, on the one hand, it is contrary to the laws of transmission, which we have been just studying; on the other hand, there already exist a certain number of observations which tend to prove that the soft chancre of a syphilitic subject may also transmit itself in its own *species*, that is to say, as a soft chancre. I should rather be inclined to believe that the simple chancre of subjects previously affected with syphilis becomes infecting, or not, according to its *origin*. When

* In 1857, the same girl re-entered St. Lazare, for affections of constitutional syphilis.

derived from an indurated source, it still retains the infecting character; when derived from a soft source, it transmits nothing but a simple chancre. I do not, gentlemen, intend, for the present, entering any further upon this question, which has not as yet been sufficiently investigated, though it seems to promise much. I shall now have to point out to you the indications relative to the treatment of the infecting chancre. However, before terminating that part which refers more especially to contagion, I shall condense into a few dogmatical propositions what the most recent investigations seem to have taught us upon this new and important question.

1. The simple chancre of virgin * subjects is transmitted in its form, that is to say, as a simple chancre.

2. The indurated chancre is also transmitted in its species in virgin subjects, that is to say, as an indurated chancre.

3. The indurated chancre is transmitted to previously infected subjects under the form of a chancre with a soft base, analogous in appearance to the simple chancre.

4. The chancre with a soft base, of syphilitic subjects, is transmitted either as a simple or as an indurated chancre. Finally, it seems probable that the form under which it is reproduced depends on the nature of its origin, that is to say, on the chancre which gives birth to it.

* I need not remark that, in syphilographic language, VIRGIN signifies, free from infection—from syphilis.

XII.—TREATMENT.

TREATMENT OF CHANCRE — ABORTIVE METHOD; ITS HIGH PRESERVATIVE IMPORTANCE—TREATMENT OF THE DIATHESIS—AT WHAT PERIOD OUGHT MERCURY TO BE ADMINISTERED? — NECESSITY OF PRESCRIBING IT ONLY IN THOSE CASES IN WHICH THE CONSTITUTIONAL AFFECTION IS FULLY DEMONSTRATED — QUESTION OF SALIVATION — MERCURY DOES NOT ACT UPON SYPHILIS BY THE PATHOGENIC EFFECTS IT PRODUCES — DOSES OF MERCURY—HOW ITS ADMINISTRATION MUST DEPEND UPON A SENSIBLE EFFECT OF THE MEDICAMENT—MERCURY IS POWERLESS WHEN EMPLOYED AGAINST TARDY AFFECTIONS OF THE DIATHESIS—SPECIFICITY OF THE IODIDE OF POTASSIUM — CONDITIONS AND DURATION OF A *RATIONAL TREATMENT* OF SYPHILIS.

Having terminated the doctrinal questions, we now commence, gentlemen, the therapeutical part of the history of syphilis. As a local lesion, the indurated chancre does not require a treatment differing greatly from that of the simple chancre. Cleanliness, regular dressings with calomel ointment or aromatic wine, amply suffice to aid the work of reparation of the primitive affection. Besides, you know that this variety offers the remarkable character of rapidly going through its periods, and spontaneously cicatrizing, unless its natural progress be hindered by an unnecessary intervention. But it is here especially that cauterization, practised at the "*début*" of the disease, presents itself in all its importance. Chancre, in fact, whatever may be its nature, is never at first but a *local lesion*. Even when it is destined to infect, its influence is at first limited to the region it affects. The general infection is not, as I have often repeated, an immediate and instantaneous result; it is an affection consecutive to the manifestation of chancre, and which requires a certain time for its development.* Well, why do you not profit by this interval which separates the appearance of the chancre from the commencement of the infection, in order to annihilate the focus from whence it is going to arise?

* See Hunter on Chancre, chap. iii. par. 1.

Why not do here what everybody does in the case of the sting of a viper or the bite of a mad dog, that is to say, destroy, as soon as possible, the local affection, in order to prevent absorption and the consecutive phenomena? If the cauterization of the simple chancre presents so many advantages in transforming a specific ulceration into a simple one, deprived of all virulence, judge what benefit you may expect when, whilst destroying a chancre which would eventually indurate, you at the same time eradicate the source of the constitutional infection. No doubt the precise period at which the infection takes place, that is to say, the transmission of the virus into the system, has up till now escaped notice, and will no doubt long remain a mystery. But there is a practical fact, the result of strict observation, which may to a certain extent console us for our ignorance on this point. It is the following: of all the chancres which I have seen *cauterized*, or *cauterized* myself, *not one* has ever been followed by the special symptoms of constitutional syphilis. From this it would appear, that, during the first four days which follow the contagion, the syphilitic seed has not sufficiently implanted its roots in the economy; and that, if you are in time to destroy it, you ward off the general intoxication,—you KILL THE SYPHILIS IN ITS GERM.*

* Professor Sigmund, of Vienna, has advanced a similar opinion on the results of the abortive treatment. It is singular to compare his text with that of M. Ricord:—"The observation of upwards of a thousand cases, extending over a period of more than eleven years, has proved to me that secondary manifestations never manifest themselves when the chancre is completely destroyed within the first *four* days. I know but of two cases, and those even are doubtful, in which cauterization, practised on the fifth day, did not prevent the manifestation of secondary affections; so that if I did not prefer restricting the limits, in order to speak with certainty, I might fix the fifth day as the fatal term." (Wiener und Wochenschrift, 1855.) M. Sigmund prefers the Vienna paste as a caustic. He practises cauterization even after the fifth day; for, says he, although the chances of preservation are lessened, they are not entirely abolished; moreover, cauterization offers the advantage of preventing the chancre from being communicated to other regions, and other individuals. M. Ricord, on

You will easily understand, without my telling you, that the *excision* of chancre, practised within the same time, would be an equal means of preservation, only this method can rarely be applied. Remember that the manifestation of syphilis, and the possibility of destroying this frightful disease, depends entirely upon the abortive method. Preach, therefore, this great truth to those persons who are liable to be affected by it; tell them that infection has never been known to follow chancres destroyed before the fifth day. Let them pay the greatest attention to any suspicious ulceration, destroying it as soon as manifested, thus guarding themselves against the effects of general infection, as well as those to whom they might communicate it.

But if you have delayed destroying the ulceration, or if the patient has only consulted you at an advanced period, cauterization is useless. As soon as induration is produced, syphilis is acquired; and, therefore, by cauterizing or excising the chancre, you only destroy a symptom, without preventing the manifestation of the diathesis. Therefore, if the infection be produced (and this will be indicated to you by the induration), local medication becomes of secondary importance, and the *treatment of the diathesis* is the principal thing you have to attend to. I shall say a few words to you on this subject. The specific agent for syphilis at its commencement is, as you all know, *mercury*. I do not here intend to lay down the rules by which you ought to be guided in the administration of mercury.* I shall confine myself to the

the contrary, no longer cauterizes a chancre from the moment in which it has become indurated; for, according to him, induration is the sign of infection; when it is produced, syphilis is already present; cauterization is, therefore, useless as a preventive medication. Our Professor recommends, for abortive cauterizations, the use of a strong and truly destroying caustic. He has been in the habit of employing, for some years, carbo-sulphuric paste, which, under these conditions, furnishes excellent results as a curative treatment.

* The following are the rules prescribed by M. Ricord for the administration of mercury:—1. Administer the mercury internally, whenever the

discussion of the two following questions, which alone refer to the method I am in the habit of pursuing.

state of the organs of digestion will allow of your doing so. 2. When this cannot be effected, apply it to the skin. 3. In patients in whom the mucous membrane easily becomes irritated, and whose skin, being equally sensitive, will not allow a treatment of this kind to be followed for any length of time, the two modes of administration must be used alternately. 4. There are patients who are inaccessible by the skin and mucous membranes of the organs of digestion, but in whose case some good may be derived from the inspiration of mercurial vapours. 5. Although mercury acts specifically and independently of the *forms* under which it may be administered, still the choice of these forms is a matter of importance. An individual who may prove refractory to one of these may be strongly acted upon by another, and will only derive benefit from the one which is most appropriate to his constitution. Thus mercurial ointments have not the same effect upon the skin of all patients. I have often shown individuals at the Venereal Hospital, upon whom frictions with strong mercurial ointment, in large doses, and continued for a considerable time, produced no effect whatsoever, and who had subsequently experienced the curative effects, and suffered from salivation, after four or five days' application of the plaster of "*vigo cum mercurio*" on the integuments,—that of the thighs, for example. It is the same with mercury administered internally; one preparation has no effect upon a patient, whilst another either rapidly cures him or gives rise to exaggerated pathogenic effects. M. Ricord usually employs the proto-iodide of mercury, and commences by administering one grain every evening, a few hours after the last meal. When the dose is to be increased, one is taken in the morning and another in the evening, &c. 6. The apparent effects of mercury, as a morbid or as a curative agent, are rarely more than eight days in manifesting themselves; therefore as long as no ill effects appear, or any favourable change in the malady is obtained, the daily dose of the medicine must be increased every eight days. 7. The moment an improvement is obtained, you must stop at the dose which produced it, and not increase it until you arrive at a *statu quo*. 8. If the mercury produces ill effects, you must diminish the quantity, or suspend it completely; observation having invariably shown us, with few exceptions, that if the syphilitic symptoms, in such cases, are not always aggravated, the cure, at all events, is nearly always retarded. 9. When the mercurial effects have disappeared, and if the syphilitic symptoms still persist, the use of mercury must be resumed, with those modifications required by the peculiar nature of the affections, depending either on the surface in which the medicament had been applied, the form under which it had been given, or the dose in which it had been administered. 10. The same inconveniences are not always occasioned upon resuming the remedy, after having wisely suspended or simply diminished it. It sometimes happens, however, that one is obliged to suspend and resume the use of mercury in certain syphilitic affections.—A. F.

Ought the mercurial treatment to be commenced at the first appearance of the infecting chancre, or ought it to be deferred until the manifestation of constitutional affections? From what I have previously told you of induration, you will readily foresee my answer. With me, induration is the commencement of the diathesis; the indurated chancre is in some measure nothing more than the *first* secondary symptom. Well, holding this opinion I ought to administer and, in fact, do administer mercury from the *commencement*. A well-defined induration suffices for me to prescribe the general treatment, and I boldly attack the diathesis the very day I recognise its existence. Certain practitioners, whilst attributing to induration the prognostic value which we ourselves attach to it, prefer waiting until constitutional manifestations have developed themselves, before administering mercury. For my part, I confess that I do not comprehend the advantages derived from this practice. If the diathesis exists at the commencement, why not combat it at once? If it must necessarily and shortly reveal its existence by a series of more or less disagreeable and painful symptoms, why not attempt to arrest the progress of these manifestations? Is it better to allow a lesion to be manifested before treating it, than to prevent its development? Truly, I should like to know whether patients are satisfied with this expectation, and whether they sincerely approve this prudent slowness when they commence either to feel the nocturnal sting of syphilis, or to see their skin covered with maculæ, their foreheads adorned with the crown of Venus (CORONA VENERIS), or their head deprived of hair. However, although a prompt intervention of the general treatment is advantageous, as I have shown you, yet it does not follow that we must immediately recur to mercurial medication in all cases, and without distinction. If it is useful to prescribe mercury FOR syphilis, it is no less important to apply it ONLY for syphilis. Now, you know that the diagnosis of chancre presents difficulties

that will often hold in check the judgment of the most experienced practitioners. How will you, therefore, conduct yourselves in those cases, unfortunately but too numerous, in which the ambiguous character of the primitive affection will only allow you to SUSPECT a commencing syphilis? I cannot, gentlemen, sufficiently insist upon this point. I cannot sufficiently recommend you to prescribe the mercurial treatment only in those cases in which the constitutional infection is fully demonstrated. If the least doubt rests on your minds, if the slightest uncertainty withholds your diagnosis, I adjure you to defer all specific medication, and to *know how to wait*. In fact, this is not a simple therapeutical question, but a question in which the *interests of society* are at stake. It is not a matter of indifference to a man to know whether he is, or is not, affected with syphilis. A disease which attaches itself for ever to the body of its victim,—a diathesis which follows the infected individual beyond the period of his own existence, and which may extend itself as an indelible mark to his posterity,—a transmissible, an hereditary constitutional vice,—are not, I should think, things of slight importance or of frivolous consideration. Men of the world do not deceive themselves on the *possible consequences* of a chancre; and understand, gentlemen, that more than one patient, for the sake of his conscience, for his honour, for the security of his family, will exact from you on this delicate question complete satisfaction, that is to say, an absolute and unerring diagnosis, containing an irrevocable prognosis. These few words will suffice to make you understand, without my insisting any further upon this point, that syphilis has undoubtedly its social consequences. If for a *doubtful* primitive affection you administer mercury at the commencement, see in what conditions you place yourself. You deprive yourself, and you deprive for a long time your patient, of an exact knowledge of his state; you place before him a phantom, and you leave him in a security for which he may

have to pay dearly. Mercury, in fact, has for its result the prevention and the retardation of constitutional manifestations. Now, I ask you, if the specific medicine has been commenced at the first manifestation of the disease, what signification will you give, under these conditions, to the absence of affections in the first months following the chancre? Are you to regard the actual preservation as a proof of a complete and absolute immunity, or simply as a temporary effect of the treatment? You certainly would not know whether to attribute it to the nature of the primitive affection, or to the prophylactic intervention of the remedy. And several months, nay, years, will elapse without your diagnosis being advanced further than it was the first day. Let us suppose, on the contrary, that being uncertain as to the nature of the chancres, you allow nature herself to act, and abandon the malady to its spontaneous development. If the diathesis exists, you may be certain that, at the end of a few weeks, its presence will be indicated by unmistakeable manifestations, and from that moment the diagnosis will be clearly established. Suppose, however, that nothing be produced within the first two, three, or four months, we have here some presumption of immunity; but if the fifth and then the sixth month passes by without any manifestation of syphilis having been observed upon your patient, the diagnosis *then* will be made, and your prognosis fully established. The non-infection will be certain, and you may, without fear (I affirm it from an experience of a quarter of a century), give your patient the formal assurance of an absolute immunity for the present, as well as for the future. The second point I intend explaining relates to salivation.*

* The action of mercury upon the mouth and salivary glands may be prevented or arrested even whilst the exhibition of the mercury is continued, provided that chlorate of potash be administered at the same time, in doses of from *one* to *two* scruples, thrice daily.—C. F. M.

It is not long since that salivation was regarded as useful, as *indispensable* to the cure of syphilis, and that the practitioner regarded it as the extent of the treatment; provoking it in order to keep it up, renewing it the instant it ceased. These opinions, gentlemen, these practices left us by our forefathers, and but too readily adopted by some modern practitioners, have certainly contributed to propagate amongst the people at large that terror of mercury which has been taken advantage of, and is still taken advantage of, by the empirics of all times. We must, therefore, boldly attack these antiquated doctrines. Remember, therefore, that mercury does not act upon syphilis by the disorders it may be made to produce on the constitution; its influence as a medical agent is not to be measured by its pathogenic effects, —far from it; the contrary would be nearer the truth. It has been demonstrated by strict observation, that the *curative action of mercury is generally suspended from the moment that the morbid symptoms, which especially belong to this agent, begin to be produced.* Whatever may be the theory adopted concerning the curative action of mercury (and each school explains it in its own manner),* it is an established fact that its specific influence on syphilis can never be attributed to an exaggeration of some of its effects,—such as fever, increase in the urinary secretion, in the alvine evacuations, cutaneous irritations, salivation, etc. Hunter has long ago proclaimed this fact.† Why did it not pass, for the good of patients and the honour of our art, into the minds and into the practice of those physicians who came after him? ‡

* See Hunter, chap. iii., par. 12: Observations on the Different Methods of administering Mercury. Introduction, p. 1, and following.

† See Hunter, Constitutional Syphilis, chap. iii., pp. 3 and 12.

‡ It is a remarkable fact that those authors who have declared salivation to be indispensable in the treatment of syphilis were not able to deny that cures might be effected without causing any flux from the mouth. Astruc, for example, after having stated that it is impossible to cure syphilis with-

You will, therefore, cure your patients, gentlemen, without subjecting them to the torture of salivation; and the less they feel the disagreeable and painful effects of mercury, the better they will be cured. If, notwithstanding every precaution, these effects should be produced, you will oppose to them immediately an appropriate medication, especially now that therapeutics have placed in your hands an agent against one of the most frequent mercurial affections, almost worthy of being elevated to the rank of a true specific—the chlorate of potash.* But, gentlemen, as nothing exists, however bad, from which some benefit may not be derived, you may not only avail yourselves of the morbid effects of mercury, but you ought even, in certain circumstances, to consult them, as a guide to indicate the course you are to pursue. I will explain myself. There is certainly, not for mercury, more than for any other medicament, a fixed, invariable, and absolute dose which influences all constitutions, and cures all cases. Now, on what indications will you establish, in the treatment of syphilis, the *dose* of the specific that is to be administered? No doubt, if some manifestation of the diathesis be present, its influence on the actual symptom will serve you as a guide. Under these conditions, it is but natural to keep to the first dose, if it cures; to increase it, if it appears insufficient. In this case you have a measure; but remember that this measure is often wanting. You do

out producing a flux from the mouth, furnishing at least from one to two pounds of saliva every twenty-four hours, says elsewhere, in the most formal manner, that mercury may easily cure without producing salivation. —See Book IV., chap. 7.

* I have this year experimented with the chlorate of potash against mercurial salivation, under conditions totally differing from those adopted up to this day, in order to appreciate its therapeutical action. The results, I believe, obtained by these experiments give a more precise knowledge of the true efficacy of the remedy, and a series of practical indications truly unexpected. My present interne has collected and published the results of these observations, for which I refer you to his Memoir.—V. note XII.

not prescribe mercury only as a curative against affections that you have under your eyes; you give it also as a *preventive*. Well, in this latter case, when you have no manifestation of the diathesis by which you can judge of the influence of the remedy, how will you know whether the constitution of your patient is or is not influenced by the agent? In this case your guide will be one of the pathogenic effects of mercury. By the slight buccal irritation which generally accompanies the first doses administered, you will evidently recognise that the constitution has been "TOUCHED" by the remedy; you will, so to say, read on the gums of your patient the dose which it requires to influence him;—a dose which may vary considerably, according to the individual, the sex, the state of health, and a thousand other impenetrable idiosyncrasies. From the moment you have recognised this symptom,* your measure is known, your course traced out. Diminish slightly the proportion of the remedy, in order to keep yourself within the pathogenic effect, and continue to administer it in the same quantity, taking care, however, to interrogate from time to time, to FEEL, so to say, the constitution of your patient by a slight increase in the agent, in order to assure yourself that the actual dose is still sufficient.†

If mercury is the specific for syphilis, as it is said to be in a too general manner, it is especially against the initial forms of the diathesis that it exercises its powerful influence. It is against the apparent secondary affections that it is most

* It must be remembered that I only mean to speak of a slight buccal irritation. It is not salivation that should be consulted as a measure for the doses of mercury to be administered to different patients. The slightest irritation of the gums is sufficient for my purpose. So that the day I recognise its presence, I diminish the dose of the agent, or I administer the chlorate of potash.—RICORD.

† Hunter has expressed the same ideas, and prescribed analogous rules, in one of his most remarkable chapters on the treatment of syphilis.—See Hunter, Constitutional Syphilis, chap. iii., par. 4.

active; but it undoubtedly loses its therapeutical effects against the more tardy manifestations. If I could follow, with you, the evolutions of syphilis in each of its phases, I could show you that the energy of mercury diminishes and exhausts itself the greater the distance from the commencement of the infection. I could show it you extraordinarily efficacious in the first stage of syphilis, less powerful against the symptoms of a more advanced period, finally becoming almost inert, and at times even hurtful, when the last forms of the diathesis are present. So that a practitioner would be utterly defenceless against those tardy or tertiary affections, formerly justly regarded as *incurable*, unless he had another weapon wherewith to attack them—a new-comer into the therapeutical arsenal of syphilis, but not less admirable than its elder brother, mercury; I mean, the iodide of potassium. If mercury finds its true application in the treatment of the earliest symptoms of syphilis, it is, on the contrary, against the more tardy forms that the iodide of potassium should be used.*

* The following is the manner in which M. Ricord administers this remedy:—

℞. Syr. Gentianæ . . ℥xx.
Iod. Potass . . ʒx. Misce.
Three tablespoonfuls to be taken daily.

According to our Professor, the medium dose of the iodide of potassium varies from two to three scruples daily; a less dose is almost always insufficient. In some cases this medium dose must be greatly increased. Such are the affections which compromise in a few days the integrity of an organ, and necessitate a repressive remedy of great energy. Under these circumstances M. Ricord prescribes at once, from the first day, three or four scruples of the iodide of potassium; in the following days, he increases this dose, according to the indications, to *five, six, eight scruples, or even more.* This bold treatment is crowned with extraordinary success. The administration of the iodide of potassium is known to have been carried EXPERIMENTALLY to far higher doses (twenty, forty, fifty, and even sixty scruples daily). But observation has demonstrated, that in these cases the therapeutic influence of the remedy was not increased proportionally to the quantities absorbed by the patients; the pathogenic effects only were exaggerated.—A. F.

Numerous comparative experiments have, in fact, proved to me that, whilst exercising but a moderate influence on secondary affections, this remedy constitutes an agent of the most heroic kind against manifestations of a later period; so that, now-a-days, it may be considered, without fear of exaggeration, as *the specific for tertiary syphilis.**

The iodide of potassium is not only an extraordinary curative agent; it is, moreover, an eminently *preventative* medicament. Thus you must invariably prescribe the iodide after employing mercury, previous to terminating the treatment of a case of syphilis. It is at this price only that you may eradicate the diathesis; or, at all events, arrest its distant manifestations; it is at this price that, having made sure of the present, you may be fore-armed against the future. After having indicated to you the remedies applicable to the various periods of syphilis, my next step should be to determine the conditions and the duration of a complete treatment, sufficing for the most efficacious and least doubtful preservative that our art can furnish to patients. But, unfortunately, gentlemen, I regret to tell you that every *absolute* rule on this point is before-

* Some practitioners only prescribe the iodide of potassium, for tertiary affections, after having subjected the patient to a mercurial treatment, as if the iodide could not act unless preceded by this remedy. M. Ricord protests against this practice. According to him, the iodide acts AT ONCE upon tertiary affections. Not only is mercury useless under these conditions, but it may even become baneful in retarding the use of the only remedy which enjoys an incontestable specificity against the tardy manifestations of the diathesis. It would not be rare, according to our Professor, to find tertiary affections produced during the course of a mercurial treatment. If such is the case, how can we expect mercury to cure lesions which it cannot prevent? There are cases in which mercurials should be administered contemporaneously with the iodide of potassium; when, for example, there exist affections of transition from the secondary to the tertiary period, such as syphilides in their deep form, or else when secondary symptoms accompany manifestations of a later date. Under these entirely exceptional conditions the iodide does not appear alone to suffice, and Mr. Ricord is in the habit of prescribing mercury with it. It is the association of these two remedies that constitutes what is called the MIXED TREATMENT of syphilis.—A. F.

hand tainted with error, for the very reason that it is absolute. Neither the dose, nor the pharmaceutical form, nor the duration of the treatment, will *invariably* and *infallibly* give immunity, whatever may be the care employed by the practitioner in directing the medication, and the docility of the patient in following it. As I have said elsewhere, the profession must here respect the science: the science only promises a *probable* immunity at the price of the best treatment; the practitioner must not bind himself further. Only it is for him, in calculating the probabilities, to give his patient the most favourable chances. Well, what are the conditions to be fulfilled for this object? To continue the treatment only until the disappearance of the affections, is, undoubtedly, the method that exposes, in the greatest measure, the patient to the consecutive manifestations of the diathesis. To persist in the use of the remedy, after the *symptoms* have been cured, as long as it required to obtain that cure, does not lead to more satisfactory results; it is either too much or too little, according to the case.* It would be equally dangerous to confide in the mathematical indications of Hunter, who measured the doses and the total quantity of mercury requisite for a patient by the number, the extent, and the duration of the ulcerations, the intensity of the symptoms, etc.† But we must, however, have a practical MEASURE. Clinical observation alone can furnish us with it; and from clinical observation we shall borrow it. Six months of mercurial treatment, at a daily dose which influences the affections to be eradicated, and which indicates, after they have disappeared, that the remedy still acts, by its well-known physiological effects, followed by a three months' treatment of the

* Dupuytren continued the treatment, beyond the extinction of the affections, during a lapse of time equal to that which it had taken to obtain the cure.

† *Vide* Chap. III.—General Considerations on the Treatment of Chancre.

iodide of potassium, destined to prevent the manifestation of the distant affections of the diathesis, such is, gentlemen, the course of treatment which is attended with the happiest results, and which is followed, in the greater majority of cases, by the complete neutralization of the poisonous virus: I would almost add, by the *cure* of syphilis; at all events, in the generality of its manifestations. This is, gentlemen, the only practical rule that I can give you. You will understand that it must undergo in your hands such modifications as may suit the various cases to which it is to be applied. I only indicate to you the outline of the course you are to pursue. This rule, I repeat, was furnished me by the patient and attentive observation of facts. May you, in your turn, by observation, extend it and render it more perfect, if it is right; correct it, if it is wrong; so as to create for the future, what we do not actually possess—a certain and complete treatment of syphilis.

XIII.

RÉSUMÉ—COMPARISON BETWEEN THE TWO VARIETIES OF CHANCRE—QUESTION OF THE DUALITY OF THE CHANCROUS VIRUS—UNITY OF THE SYPHILITIC VIRUS.

I have now described to you, gentlemen, the two grand varieties of the primary ulcer. Allow me, now that I have separately delineated the characters peculiar to each chancre, to draw a parallel between them.

1. The simple, non-infecting chancre allows the tissues in which it developes itself to retain their normal suppleness. It is a chancre with a *soft base*. The inflammatory complications that it may excite sometimes give to its base a certain degree of hardness; but you know that this hardness presents characters totally distinct from the induration peculiar to the other variety of chancre.

2. It is generally *multiple*, either *at once*, or by a series of inoculations consecutive to the first contagion.

3. Its pus possesses in the highest degree the characters peculiar to contagion; it is an inoculable pus, *par excellence.* Observe, that this specificity of the secretion, furnished by the ulcerated surfaces, persists almost during the entire existence of the chancre.

4. It is a chancre possessing an *invading and destructive tendency.* It is the variety most likely to undergo the phagedænic deviation.

We have here four well-defined characters: let us now compare them with those of the infecting chancre:—

1. Its base is indurated; and indurated in a special manner—pathognomonic.

2. It is generally a solitary chancre; rarely multiple.

3. Its pus rapidly loses all virulent specificity; at all events, for the infected subject, who within a few days becomes refractory to inoculation with his own virus.

4. The infecting chancre does not present any great tendency to extend itself; it soon limits itself, and spontaneously arrives at cicatrization. It rarely assumes the phagedænic form.

So much, gentlemen, for the symptomatology. But this comparison would be incomplete, if we neglected to add the following considerations:—The simple chancre is very common; the infecting chancre is comparatively rare. The simple chancre seems excluded from one part of the body—the cephalic region; the infecting chancre is produced everywhere. The one is, PERHAPS, transmissible to animals; the other effects but man, and all kinds of animals are constantly refractory to its virus. Finally,—and this is the principal point,—the first may be produced repeatedly on the same individual; whereas, the second can only be developed *once in its form.* If we extend this comparison to the symptomatic bubo of each variety of chancre, we shall also meet with well-defined differences. With the simple chancre, the affection of the glands is not absolutely necessary. The adenopathy

is inevitable with the infecting chancre. The symptomatic bubo of the simple chancre is an acute bubo, monoglandular, often arriving at suppuration. The pus it secretes may be a virulent pus, susceptible of reproducing, by inoculation, the characteristic pustule of chancre. Add, that this bubo is produced almost indifferently at any age, at any period of the chancre. The bubo of the indurated chancre, on the contrary, is developed "*à froid*," without pain; it is an essentially indolent, multiple bubo, reproducing in the glands the induration peculiar to chancre; it never suppurates solely by the influence of the diathesis, and never secretes the specific pus in those rare cases in which an extraneous cause determines suppuration. Its epoch of apparition is PRECISE, almost certain; and coincides with the induration of the chancre, or follows it closely.

Let us now come to the question of origin, of transmission. The simple chancre is originated by a simple chancre, and is reproduced in its own species. The infecting chancre is originated by an infecting chancre, and is also transmitted in its own form. It is true, that the indurated chancre inoculated upon a syphilitic subject gives rise to an ulceration with a soft base, analogous in aspect to the simple chancre; but, as I have told you elsewhere, this analogy is probably only apparent, for the ulceration thus developed may reproduce in its turn an indurated chancre upon a virgin subject. Finally, the investigations on contagion establish between these two varieties of chancre differences far more considerable, perhaps, than the symptomological considerations previously developed. But it is, especially, the question of prognosis which makes of the two chancres completely independent nosological species; I might almost say, opposed. The simple chancre is a local lesion, without influence on the economy: it is a *chancre without syphilis*. The indurated chancre creates a diathesis, engenders a general state, a morbid

temperament: it is the initial expression of a constitutional affection; it is the *exordium of syphilis.*

You see that under whatsoever aspect we consider these two chancres, we find nothing but differences. Symptoms, clinical forms, inoculation, contagion, prognosis, everything in fact, contributes to present them to us as two absolutely distinct species. Up to this point, gentlemen, we have confined ourselves within the limits of observation. We have only described the symptoms of each, and compared them, without entering into the doctrinal reason of the differences which this study furnishes us at each step. But I feel that this simple clinical exposition is far from being satisfactory to you: you demand a conclusion to these premises. You would have me, whilst discussing one of the most grave problems of pathology, investigate with you whether there exists or not, for each of the two chancres, a special cause, a peculiar source. You require a doctrinal formula, a THEORY (this is the great word!) which gives you the key to open the sense of the preceding facts; and your restless minds are already agitating the question of the *duality* of the syphilitic virus. Well, gentlemen, this conclusion that you require I cannot, and, I believe, nobody can, at the present day, give you; for the light is but commencing to dawn upon this important question. Many points (perhaps you are going to forget it at the moment I conclude), many points are still involved in doubt, and require fresh investigations and new efforts. The veil that covers these questions has not yet been raised; perhaps also all the data of the problem are not yet known. We must, therefore, delay the solution; we must wait. Nevertheless, whatever may be the information furnished by the future, it appears to me well established that, from this day forward, the unity of the syphilitic virus can be in no way compromised. Syphilis stands alone, and cannot be separated, so to say, into two

different morbid entities. Even should we succeed in demonstrating that the two forms of chancre belong to two distinct pathological species, we should still have done nothing to negative the unity of the virus; that would only prove that, side by side with syphilis, there existed another affection manifesting itself, like the former, by the initial symptom of a contagious and virulent pus, but not exercising, like it, an infectious influence on the economy. We should be bound to infer from that, not, as has been too lightly advanced, the duality of *syphilitic* virus, but the existence of a second *venereal* or *chancrous* virus, *independent of syphilis;* in other terms, we should acknowledge two kinds of virus, the one appertaining to syphilis, and producing the infecting chancre, the other an alien to syphilis, developing the simple chancre. The duality of the chancrous virus is, as yet, but an hypothesis which the future will judge; the unity of the syphilitic virus is a truth determined by experience and time.

NOTES AND CASES.

NOTE I.

ON THE INITIAL AFFECTION OF CONSTITUTIONAL SYPHILIS.—*Statistic of* 1856.

"CHANCRE is, therefore, the necessary exordium of acquired syphilis" (page 2).

M. Ricord has written elsewhere, "*No syphilis without chancre, or without a syphilitic father or mother.* Acquired syphilis derives its origin NECESSARILY from a chancre." This great law respecting the origin of syphilis, which M. Ricord has energetically defended during so many years by his writings, at the tribune, and in his clinical lectures, has now been sanctioned by time and experience. Desirous, however, of giving a fresh proof to his pupils of this year, M. Ricord had requested me during his clinical lectures to take notes of all the observations made on patients admitted into the wards for affections of constitutional syphilis. This was the origin of the following work.* During the year 1856, 826 patients affected with various kinds of constitutional syphilis were admitted into the wards of the hospital, or observed among the out-patients. These patients may be classed in two groups, as follows:—

Patients having secondary affections		759
,,	tertiary ,,	67

* I must add, that this work has been completed since the time it was read by M. Ricord at his clinical lectures. I have annexed to it the statistic of the last quarter of 1856, so that the following table contains the whole of this year's proceedings.

Now, on the 826 patients, the chancre could be recognised 815 times as a prelude to constitutional affections,—and that, either by the statements of the patients, or by the results obtained by our investigations; eleven cases only appeared to me as forming an exception to this law, that is to say, that on eleven patients affected with syphilis, the chancre could not be retraced AS THE ORIGIN, with certitude, or else that the patients attributed to another source the affections they presented.

But let us attentively analyze these eleven cases.

1 and 2. Two patients, the one aged eighteen, the other twenty-five, never previously affected with any venereal disease, manifest almost identical symptoms, viz., the former, gummy tumour of the velum palati and an ulcerated tubercle on the posterior parietes of the pharynx; the second, a gummy tumour of the velum. Notwithstanding the absence of precise indications, M. Ricord did not hesitate to attribute the affections presented by the two patients to an hereditary diathesis. These two cases, therefore, cannot constitute an exception to M. Ricord's law, simply relative to acquired syphilis.

3. We have here a patient admitted into the hospital with the following symptoms:—confluent and hypertrophieal anal aphthæ, secondary balanitis, specific bi-inguinal adenopathy, cervieal bubo, alopecia, cephalæa, etc. This patient denied, in a formal manner, any venereal antecedent. A minute examination led us to discover on the scrotum the existence of a rounded, whitish, wafer-like cicatrization—an undoubted indication of an old and deep-seated ulceration, the origin of which might be specific. The patient, in fact, confessed that, four or five months previously, he had been affected with a large "*bouton*," developed on the seat of the actual cicatrization, and which had persisted during several weeks. The base of the cicatrization did not present any induration; but the existence of the inguinal adenopathy gave

to this ulceration its true character as the origin of the diathesis.

4. In this fourth case, we have a child who has been subjected to "*à præposterâ venere*" during the month of October, 1855. He entered the Midi in 1856, for symptoms of secondary syphilis. The primitive affection could not be retraced. The child had experienced, during the months of November and December, pains in the anus, accompanied by a slight loss of blood at the time of defecation; but he never perceived any external sore.

5 and 6. These two cases relate to patients affected with secondary syphilis, who confessed that they had allowed themselves to be used in an unnatural manner. They both denied the existence of any chancre preceding the affections they actually presented: one of them had been for the last eighteen months affected with gonorrhœa. On this latter one we discovered a cicatrix occupying the margin of the anus; but on the former we were unable to recognise the slightest trace of chancre.

7. This patient, affected with papular syphilidis, alopecia, cephalæa, etc., attributed the origin of these affections to an ulceration in the vicinity of the anus, which, according to him, had been treated as a chancre in one of the hospitals in town: there was not the slightest trace of this ulceration at the time of the admission of the patient into the hospital.

8. A patient affected with papular syphilidis; bi-inguinal adenopathy, hard, multiple, and indolent; phymosis of extreme tightness, allowing only the summit of the glans to be seen; denial of any venereal antecedent. The patient only said, that about six weeks or two months previous to the actual affections, he had contracted a slight running between the prepuce and the glans—a running which he attributed to a congenital deformity. By exploration, I could not detect a well-defined induration under the prepuce; the finger was, nevertheless, arrested upon a point of the corona

presenting a slight hardness. But the presence of an inguinal adenopathy, well defined, clearly proved a chancre.

9. Patient affected with tubercular syphilidis; as antecedents, three gonorrhœas, one in 1846, the second in 1853, the third in 1855. According to the patient, he had *never* been affected with chancre. But we discover a rounded, brownish cicatrix upon the left commissure of the lips, and an indurated gland under the maxilla of the same side. According to the patient, the existence of the "bouton" on the lips dated eighteen months. Would not, under these conditions, the diagnosis of a labial chancre be beyond any doubt?

10. L——enters the Midi on the 20th of June, affected with a confluent erythematous syphilidis, mucous papules on the scrotum, cervical bubo, etc. He presents, moreover, a bi-inguinal adenopathy, hard, multiple, and indolent, extremely well defined; as antecedents, eight gonorrhœas during the last ten years. The last had been contracted in the month of March, 1856; it had only lasted a few days, according to the patient, who had been surprised at its benignity; it had only furnished a slight moisture, dark in its colour, and often mixed with blood. The pain during the evacuation of the urine had only been experienced at the extremity of the canal. These latter characters, which appertain to chancrous gonorrhœa, permitted us to admit an urethral chancre as the antecedent of the affections actually presented by our patient. What still further contributed to render this diagnosis more acceptable was the existence of an indurated dorsal lymphangitis and a double specific inguinal pleïad.

11. The last case is analogous to the preceding one. The patient regarded a gonorrhœa as the origin of the affections of constitutional syphilis which had brought him to the hospital. But this gonorrhœa had presented characters entirely similar to those of the preceding patient; moreover, there remained on one of the lips of the meatus urinarius a

remarkable hardness, which added to the probability of an urethral chancre.

What remains, therefore, of the eleven cases which we have enumerated, as offering so many exceptions to the law of origin promulgated by M. Ricord? The two former are evidently cases of hereditary syphilis; in the sixth and seventh, the origin of the diathesis may unmistakably be attributed to chancres that had passed unperceived, but the cicatrices of which we had been able to recognise (anal chancre, perineal chancre); the same may be said of the third, in which the existence of a scrotal chancre seems extremely probable; the same again with the ninth, of which the labial macule is an undoubted proof (chancre labial). In the eighth case, the impossibility of employing direct exploration must render us cautious in diagnosing in one sense more than in another; and yet the existence of a chancre is rendered at all events probable, 1st, by the results obtained by the touch; 2nd, by the presence of the inguinal adenopathy. The tenth and eleventh cases are, no doubt, those most subject to dispute; for the existence of an urethral chancre cannot be strictly demonstrated, but in all cases it has in its favour all *rational probabilities*. Let us admit, for one instant, that our two patients had been really affected with intra-urethral ulcerations; I ask you whether, at the time they presented themselves for our examination, they could or ought to offer other symptoms than those that have been described? The fourth and fifth cases, therefore, would be the only true exceptions, in which the existence of the chancre could not be demonstrated. But if we call to mind the peculiar conditions under which these two observations were placed,—if we take into consideration the peculiar seat chosen by the initial affection, the time that had intervened between the commencement of the disease and that at which the patients presented themselves at the Hospital,—it is impossible to

appreciate seriously these two incomplete cases and cite them as formal exceptions to M. Ricord's law. From this rapid analysis it, therefore, results that not one of the preceding observations may be regarded as being in opposition with this great doctrinal principle; syphilis can only derive its origin from a chancre. In 826 patients, not a single exception, worthy of being mentioned, has occurred!—FOURNIER.

NOTE II.

THEORY OF THE DOUBLE VIRUS.—*M. Bassereau.*

The following are the principal points of this theory, such as it has been announced by its author:—

"It has been demonstrated by observation, that amongst the chancres treated without mercury, and cicatrized by the most ordinary means, some, as is the case with simple sores, seem to limit their entire action to the ulcerated part, or at most to the neighbouring glands; whereas others engender a pathogenic disposition, in virtue of which various affections are developed in the economy, which at times remain during life, and to which the name of constitutional syphilis has been given. The true cause of this diversity of action on the economy is that all chancres are not of the same nature, some being the simple contagious ulcers known for ages, others belonging to a disease which, according to authorities in whom the utmost faith can be placed, seems only to have manifested itself in Europe towards the end of the fifteenth century,—a disease of which the ulcer seated on the genital organs forms only the first stadium or *primitive symptom*, as it is called. The first proof of the diversity of nature of these two chancres rests on observations, which demonstrate that one species cannot engender the other; in other words, that an individual affected with a chancre, *not* followed by any constitutional affection, can never communicate to another in-

dividual a chancre which *is* followed by the secondary symptoms of syphilis, and *vice versâ*. The second proof is historical. In fact, when we read all that ancient and modern authors have written on the diseases of the organs of generation, we find that gonorrhœa, chancre, bubos, and vegetations are mentioned, up to the last years of the fifteenth century, as maladies requiring only local treatment: consecutive affections had never up till that time been heard of. The end of the fifteenth century is marked by the appearance of a NEW DISEASE, according to all the contemporary authors. This malady commences by ulcers, which are rapidly followed by pustular eruptions over the whole body, and frightful pains in the head and in the extremities. Those who were eye-witnesses of the appearance of the new disease do not confound the callous ulcerations by which it commences with the ulcers of the organs of generation, known for ages. Thus, these two species of contagious ulcers occupy, in their writings, separate chapters, and even books. But twenty or thirty years after the apparition of syphilis in Europe, a great number of physicians, not knowing, as those who had witnessed the first ravages, how to distinguish the affections by which the new disease commenced from those which had no relation whatever with it, assumed by degrees the habit of submitting to mercurial treatment, without distinction, all patients affected with blenorrhœa, chancres, and bubo; for it had already passed into general practice to administer mercury, not only as a modificator of existing syphilitic symptoms, but as a prophylactic agent against affections to come from the moment the first signs of contagion commenced to appear. The confusion which reigned in practice was soon introduced into the works of the day; the syphilographs of the sixteenth century successively confounded with syphilis all the venereal symptoms known since antiquity, and which the physicians who practiced during the latter years of the fifteenth century had

taken care to keep distinct from the new disease. The greater part of the syphilographs, who wrote after the fusion of the two venereal affections into a *single malady*, perceived that there was no similarity between the former descriptions of syphilis and a great number of those that were advanced since. But, instead of seeing in this want of similarity the addition of certain symptoms to the new disease, which it was customary to keep distinct, they thought that the new symptoms contained in these latter descriptions owed their origin to certain variations in form which syphilis had undergone. Hence the name of *protée* pathological, given to it by Fallopius, who had admitted, on the faith of his master, Brassavole, that it might manifest itself at times under the form of an urethral running; at others, under that of an ulcer or a bubo, limiting its action on the economy to one of these manifestations; and again, at other times, it commenced by one of those affections which finally ravaged the whole economy. This doctrine of the unity of nature of all venereal affections, which commenced to reign towards the middle of the sixteenth century, produced two equally unfortunate results: the first is, that it caused to be regarded as identical affections those which in nosology should ever remain separate; the second is, that it exposed during three centuries a host of patients to all the inconveniences resulting from a mercurial treatment."—Bassereau.

NOTE III.

SYPHILISATION.—*M. Lindman.*

Where are now the syphilised individuals? Is it the courageous experimentalist, M. Lindman, who has inoculated on himself 2,200 and more chancres, without ever having been able to obtain that happy state of saturation, the last wish of syphilisators? This number of 2,200 chancres is not an

approximative valuation, it is an exact arithmetical sum. We have here chancres counted one by one, and counted by an observer as strict as he is devoted. Besides, this figure is far below the actual number of inoculations at which M. Lindman has now arrived; for on the 26th of November he says: "I have made upon myself a very considerable number of inoculations with simple pus, and I still continue to do so daily. I have counted with the greatest care 2,200. Since I arrived at this number, I have given up counting; but I have greatly passed this figure, by some hundreds at least,—perhaps by 500. I have latterly again inoculated myself; and ever with the same success. I never obtained a negative inoculation with the pus of a simple chancre." And, in fact, M. Lindman showed us on his fore-arms ulcerations that were in full activity, as well as a great number of recent cicatrices.—FOURNIER.

NOTE IV.

OBSERVATIONS ON THE QUESTION OF THE CEPHALIC CHANCRE.

I reproduce here two observations relating to the interesting question of the cephalic chancre The first, which was communicated to me by Dr. Puche, is an account of all the cephalic chancres observed by this learned practitioner since the time he first entered the Midi. The second is a similar account of all the chancres of the same region observed during the course of this year (1856), at the Hospital of the Midi, as well as at the Infirmary of St. Lazare.

As M. Ricord has said, in his clinical lectures, the document furnished by M. Puche has all the more value, independently of the scientific authority of its author, from the circumstance that the greater number of observations of which it is composed were collected at a remote period; that is to say, at a time when the problem of the cephalic chancre

had not yet been thought of. It may, therefore, be regarded as the expression of clinical truth taken from nature, observed and described without party-spirit. I think it would be superfluous to reproduce these observations *in extenso*. I shall give but a summary of them, insisting only on those particularities which relate to the present question.

Obs. 1. A. patient, aged 25; sanguine temperament; robust constitution; first venereal affection. Indurated chancre of the upper lip; submaxillary adenopathy; papular roseola; double cervical adenopathy.

Obs. 2. Patient, aged 19; lymphatic temperament; middling constitution; first venereal affection. Indurated chancre on the upper lip; submaxillary adenopathy; roseola.

Obs. 3. Patient, aged 38. Indurated chancre on the upper lip; indurated chancre on the lower lip. Mercurial treatment, commenced previous to the manifestation of any constitutional affection. (The patient only remains eighteen days at the Midi; lost sight of since.)

Obs. 4. Patient, aged 31; lymphatic temperament; first venereal affection. Indurated lingual chancre; Hunterian chancre on the cheek, near the commissure of the lips; submaxillary adenopathy; roseola; cervical adenopathy.

Obs. 5. Patient, aged 23; sanguine temperament; middling constitution. A gonorrhœa twenty months previous to the actual chancre. Indurated chancre on the upper lip; submaxillary adenopathy; papular roseola; mucous tubercles on the scrotum and on the penis; impetigo of the scalp.

Obs. 7. Patient, aged twenty; lymphatic temperament; middling constitution. Gonorrhœa contracted contemporaneously with the chancre. Chancre on the upper lip; ulcerated mucous papules on the lips and isthmus faucium; mucous papules on the anus and toes; left cervical adenopathy.

Obs. 8. Patient, aged twenty-seven; lymphatic tempera-

ment; feeble constitution. Urethritis five months previous to the actual affections. Chancre on the upper lip; chancre on the tongue; double and indolent submaxillary adenopathy; mucous papules on the isthmus faucium, the uvula, and the amygdalæ.

Obs. 9. Patient, aged nineteen; lymphatic temperament; no venereal antecedent. Indurated chancre on the upper lip; submaxillary adenopathy; papular roseola; mucous tubercles on the glans, the scrotum, and anus; cervical adenopathy.

Obs. 10. Patient, aged thirty-five; lymphatico-sanguine temperament, middling constitution, no venereal antecedent. Indurated chancre on the upper lip, submaxillary adenopathy, erythematous roseola, mucous tubercles on the scrotum and internal surface of the thighs, specific ophthalmia, alopecia, cephalæa, cervical adenopathy.

Obs. 11. Patient, aged thirty-two; an urethritis twelve years before the chancre. Indurated chancre on the lower lip, near the commissure, mucous aphthæ on the velum palati, cervical adenopathy, urethritis four months after the chancre.

Obs. 12. Patient, aged forty-four, sanguine temperament, vigorous constitution. Chancres at twenty-two years of age, not followed by consecutive manifestations. Indurated chancre on the upper lip, submaxillary adenopathy, papular roseola, mucous papules, left cervical adenopathy.

Obs. 13. Patient, aged twenty-six, sanguine temperament, strong constitution. Chancre at the age of twenty-two, with urethritis; no consecutive affection. Indurated chancre on the tongue. Mercurial treatment commenced on the fifteenth day of the disease. (The patient is lost sight of a few days afterwards.)

Obs. 14. Patient, aged thirty-five, strong constitution. Chancres at the age of twenty-eight, not followed by constitutional affections. Indurated chancre on the upper lip, induration well defined. Mercurial treatment, commenced

on the twenty-first day of the disease, and followed for thirty-four days, without the manifestation of any affections. (Lost sight of.)

Obs. 15. Patient, aged twenty-four, lymphatic temperament; no previous venereal affection. A chancre "PARCHEMINÉ" on the lower lip, copper-coloured papular eruption, mucous tubercles on the anus and scrotum, pustular eruption on the scalp.

Obs. 16. Patient, aged twenty-seven, no previous venereal affection. Labial chancre, mucous tubercles on the anus and in the throat, falling off of the nails of the toes and fingers.

Obs. 17. Patient, twenty-seven, sanguine temperament, strong constitution, no venereal antecedent. Indurated chancre on the lower lip, submaxillary adenopathy, otitis. Mercurial treatment commenced on the twenty-first day, and continued during two months, without constitutional affections. (Lost sight of.)

Obs. 18. Patient, aged twenty-two, lymphatic temperament, a former gonorrhœa. Chancre in the naso-labial groove, submaxillary adenopathy, extremely well defined, mucous papules on the scrotum and integuments of the penis, balano-posthitis, mucous papules on the lips and amygdalæ, specific psoriaris, cervical adenopathy, rheumatoid pains.

Obs. 19. Patient, aged twenty-four, urethritis at the age of fourteen, simple chancres at twenty-one years of age, treated without mercury, by M. Puche; no consecutive affection. Lingual chancre, submaxillary adenopathy, erythematous roseola, erythema of the amygdalæ, sore throat, alopecia, cervical adenopathy, nocturnal cephalæa.

Obs. 20. Patient, aged twenty-two; lymphatic temperament (seen but once at the consultation). Indurated chancre on the upper lip, submaxillary adenopathy.

Obs. 21. Patient, aged nineteen, lymphatico-sanguine temperament, robust constitution, no venereal antecedent. Indurated chancre on the upper lip, submaxillary adenopathy,

troublesome diarrhœa, which was suddenly suppressed at the moment of the eruption of a confluent psoriasis, cervical adenopathy.

Obs. 22. Patient, aged twenty-five, lymphatico-sanguine temperament, urethritis fifteen months previous to the actual chancre. Indurated chancre on the lower lip, submaxillary adenopathy, papular syphilidis, sore throat.

Obs. 23. Patient, aged twenty-seven, lymphatic temperament, no venereal antecedent. Indurated chancre on the tip of the tongue, submaxillary adenopathy, transformation of the chancre into a mucous tubercle, mucous aphthæ on the velum palati, cephalæa, simple chancre on the penis, consecutive to the infection.

Obs. 24. Patient, aged twenty-four, sanguine temperament, robust constitution, no venereal antecedent. Indurated chancre on the face, submaxillary bubo, suppuration four months after the appearance of the chancre, at a time when the cicatrization was complete (strumous adenitis), roseola, mucous tubercles on the lips and the isthmus faucium, relapsed roseola, rheumatoid pains.

Obs. 25. Patient, aged thirty-two, sanguine temperament, robust constitution, no anterior venereal affection. Indurated chancre on the lower lip, indurated chancre of the index finger of the left hand (these two chancres, which appeared simultaneously, derived their origin from the same source), roseola, mucous papules on the glans, prepuce, lips, and anus, cervical adenopathy, alopecia, rheumatoid pains.

Obs. 26. Patient, aged thirty; no venereal antecedent. Indurated chancre on the lower lip, submaxillary adenopathy, papular roseola, mucous aphthæ on the lips, velum palati, and isthmus faucium, cephalæa, cervical adenopathy.

Obs. 27. Patient, aged twenty-four, sanguine temperament, strong constitution. Indurated chancre on the upper lip, submaxillary adenopathy, mucous papules on the lips, scabby eruption on the scalp.

Obs. 28. Patient, aged thirty. A chancre "*parcheminé*" on the lower lip, indurated submaxillary adenopathy, papular roseola, mucous aphthæ on the lips, of an annular form, cephalæa, posterior cervical and mastoidean adenopathy, mucous papules on the velum pendulum palati.

This summary, therefore, contains twenty-eight observations relative to primitive affections developed on various regions of the head, the lips, the tongue, the nostrils, the cheeks, etc. Now, out of these twenty-eight cases, there are twenty-three in which the primitive affection is followed by unmistakable symptoms of constitutional syphilis. There are five, on the contrary, in which no mention is made of consecutive affections; but in these five cases the induration of the chancre is invariably indicated by the specific adenopathy of the infecting ulcer, so that no doubt can be entertained as to the existence of the diathesis. The absence of constitutional manifestations can only be attributed to the speedy intervention of the mercurial treatment. In fact, the twenty-eight observations of M. Puche are all relative to indurated chancres, that is to say, to the infecting species of the primitive venereal ulcer; not a single example of a simple, non-infecting chancre being developed on the cephalic region.

II.

Induced by the mysterious singularity attached to the question of the cephalic chancre, I myself, under the direction of M. Ricord, have made some investigations on this subject. Out of more than 120 observations carefully collected or borrowed from various works on syphilis, I have not met, up to this date, with more than two or three cases which *seem* relative to chancres of a non-infecting nature developed on the cephalic region. Besides, none of them present a sufficient degree of certitude. I shall refer elsewhere to these investigations, and shall merely produce here the following observations, which were collected during

the course of this year, at the Hôpital du Midi, as well as at the Infirmary of St. Lazare.

Hôpital du Midi, 1856:—

Obs. 1. Patient, aged twenty-three, lymphatic temperament, feeble constitution, two former attacks of gonorrhœa, without any subsequent affections. Indurated chancre on the upper lip, seated on the left side, left submaxillary bubo, hard and indolent, roseola, mucous aphthæ in the pharynx, posterior cervical adenopathy, scabby eruption on the scalp, alopecia.

Obs. 2. Patient, aged twenty-three, plethoric temperament, very strong constitution, formerly blenorrhœa, without consecutive affections. Two indurated chancres on the upper lip, indurated submaxillary bubo,* simple gonorrhœa, dating from the same period as the chancres (same origin), papular syphilidis, mucous tubercles on the anus and on the toes, alopecia, posterior cervical adenopathy.

Obs. 3. Patient, aged thirty-four, sanguine temperament, strong constitution, gonorrhœa at the age of twenty-two, degenerated into gleet. Indurated chancre on the corona penis, chancre "*parcheminé*" on the upper lip. These two chancres were contracted at the same period, and from the same woman. Inguinal bubo, hard and indolent, submaxillary bubo, hard, voluminous, and indolent. Mercurial treatment, commenced at an early period. Extremely intense nocturnal cephalæa, rheumatoid pains, alopecia, posterior cervical adenopathy.

Obs. 4. Patient, aged twenty-three, sanguine temperament, very strong constitution, considerable muscular development; chancres on the penis fifteen months previously, no mercurial treatment, no consecutive affection; fresh chancres on the penis six months ago, no treatment, no

* There is at present (September, 1858) a patient in the Midi, under M. Ricord's care, who, three days since, was the subject of an indurated lingual chancre, and *apparently* of an *acute* submaxillary *adenite*, about to *suppurate*. To-day, the *accidental inflammation* has subsided, and the *hard, indolent adenopathy* is readily recognised.—C. F. M.

affection since this period. Chancre *parcheminé* on the upper lip, double indurated submaxillary bubo. Six weeks after the manifestation of this chancre, confluent erythematous syphilidis, mucous aphthæ in the pharynx, post-cervical adenopathy, alopecia.

Obs. 5. Patient, aged twenty-four, lymphatic temperament, no venereal antecedent. Indurated chancre on the lower lip, submaxillary bubo, hard and indolent, roseola, mucous aphthæ on the amygdalæ, post-cervical adenopathy.

Obs. 6. Patient, aged twenty, lymphatic and feeble, two former gonorrhœas, the one dating four years back, the other one month. Indurated chancre on the left labial commissure, submaxillary bubo, hard, indolent, and voluminous, papular syphilidis, mucous aphthæ on the lips.

Obs. 7. Patient, aged twenty-eight, robust and plethoric, no venereal antecedent. Indurated chancre on the nostril, roseola, buccal mucous aphthæ, several relapsed aphthæ in the mouth, scabby eruption on the scalp, alopecia.

Obs. 8. Patient, aged twenty-one, lymphatic temperament, no venereal antecedent. Indurated labial chancre. Indolent submaxillary bubo, psoriasis, mucous aphthæ on the lips and amygdalæ.

Obs. 9. Patient, aged twenty-nine, strong constitution, no venereal antecedent. Chancre on the septum nasi, roseola, mucous aphthæ on the amygdalæ, posterior cervical adenopathy, alopecia.

Obs. 10. Patient, aged thirty-three, bilious temperament, middling constitution, former gonorrhœa dating two months back. Indurated chancre on the tip of the tongue, suprahyoidean glands, hard and indolent. Erythematous syphilidis, mucous papules on the scrotum, buccal mucous aphthæ, alopecia.

Obs. 11. Patient, aged thirty, lymphatic temperament, no venereal antecedent. Indurated chancre on the upper eyelid, posterior auricular bubo, hard and indolent, roseola,

mucous aphthæ on the velum pendulum palati, the isthmus faucium, and the amygdalæ, nasal impetigo.

Obs. 12. Patient, aged twenty-nine, sanguine temperament, strong constitution, no venereal antecedent. Indurated chancre on the left labial commissure, indurated submaxillary bubo on the left side, roseola, mucous tubercles on the anus, secondary balanitis, alopecia.

Obs. 13. Patient, aged thirty-two, sanguine temperament, strong constitution, no venereal antecedent. A brownish, rounded cicatrix on the left labial commissure, without induration. The affection dates eight months back. Left submaxillary adenopathy still persisting, ecthymatous syphilidis, alopecia, cervical adenopathy.

Obs. 14. Patient, aged twenty-three, strong constitution; a former gonorrhœa, dating six months back. Indurated chancre on the lower lip, seated on the left side, left indurated submaxillary bubo, roseola, buccal mucous aphthæ.

Obs. 15. Patient, aged twenty-eight, lymphatic. Indurated chancre on the lower lip, submaxillary bubo, hard and indolent, papular syphilidis, mucous tubercles on the scrotum, around the anus, the labial commissures, and the isthmus faucium, post-cervical adenopathy.

Obs. 16. Patient, aged twenty-seven, sanguine and robust. Indurated chancre on the right labial commissure, submaxillary bubo, hard and indolent, roseola, mucous aphthæ, scabby eruption on the scalp, alopecia, cephalæa.

Obs. 17. Patient, aged sixty-five, middling constitution, bilious temperament. Indurated chancre on the right labial commissure, ulcerated aphthæ on the amygdalæ and the isthmus faucium, caries of the bones of the nose, caries of the palate bones, gummy tumours.

Obs. 18. Patient, aged twenty-one, middling constitution, lymphatic temperament, gonorrhœa dating six weeks back. Indurated labial chancre, submaxillary adenopathy, roseola.

Obs. 19. Patient, aged twenty-six, lymphatic tempera-

ment, feeble constitution, no venereal antecedent. Indurated chancre on the lower lip, indolent submaxillary adenopathy, papulo-squamous syphilidis, mucous aphthæ in the throat, on the tongue, lips, etc., cervical adenopathy, alopecia.

Infirmary of St. Lazare:—

Obs. 20. Prostitute, aged twenty-one, lymphatic temperament, feeble constitution. Indurated chancre on the upper lip, submaxillary bubo, hard and indolent, roseola, mucous aphthæ.

Obs. 21. Prostitute, aged twenty-two, sanguine temperament, strong constitution. Indurated chancre on the lower lip; indolent submaxillary bubo.

Obs. 22. Prostitute, aged eighteen, lymphatic temperament. Indurated chancre on the upper eyelid, erythematous syphilidis, mucous aphthæ.

Obs. 23. Prostitute, aged eighteen, feeble constitution, no venereal antecedent. Indurated chancre on the tongue, papulo-squamous syphilidis, scabby eruption on the scalp, alopecia, posterior cervical adenopathy.

Obs. 24. Prostitute, aged twenty-six, strong constitution, sanguine temperament. Indurated chancre on the tongue, polymorphous syphilidis, mucous aphthæ.

Obs. 25. Prostitute, aged nineteen, strong constitution, no venereal antecedent. Indurated chancre on the upper lip, papular syphilidis, mucous tubercles on the vulva.

Obs. 26. Prostitute, aged twenty-two, bilious temperament, strong constitution. Retained on several occasions at St. Lazare for simple chancres on the vulva, no consecutive syphilitic affection. Large indurated chancre on the forehead, indurated chancre on the upper lip, roseola, buccal aphthæ, alopecia.

This table does not require any comments. Out of twenty-six cases of cephalic chancres (chancres on the lips, tongue, septum nasi, eyelids, and forehead), we find twenty-four in which the specific induration, with the special symptoms of general syphilis, are indicated. In two cases only the indura-

tion could not be demonstrated, the patients having presented themselves too late to our observation; but even in these two cases, symptoms of constitutional syphilis proved the infecting nature of the chancres by which they had been preceded.

In fact, not a single exception to the law of the constant and almost inevitable induration of the cephalic chancre!—FOURNIER.

NOTE V.

SEAT OF CHANCRE.

The serious and interesting problems, to which the question of the seat of chancre has given rise, have induced M. Ricord to have a synoptic table formed, containing all the chancres observed during this year in his wards.

According to the intention of our Professor, this table should at once establish in the most precise manner the relative frequency of chancres of different regions; and, moreover, answer by numerical proofs certain doctrinal errors to which we shall presently refer.

I have, therefore, drawn up the following table of observations made upon 824 patients, on whom the seat of the chancre has been noted with precision:—

	Indurated chancres.	Simple chancres.
Patients affected with chancres on the glans and prepuce.	314	296
,, ,, chancres on the integument covering the penis	60	15
,, ,, multiple chancres on the penis; that is to say, presenting simultaneously chancres on the prepuce and integuments, the integuments and glans, &c.	11	17
,, ,, chancres on the meatus urinarius	32	9
,, ,, intra-urethral chancres, which cannot be perceived by the forced separation of the lips of the meatus; diagnosed by inoculation, by the touch, by lymphangitis, &c.	17	3

	Indurated chancres.	Simple chancres.
Patients affected with chancres on the scrotum . . .	7	
,, ,, chancres on the peno-scrotal groove .	4	
,, ,, chancres on the anus	6	2
,, ,, chancres on the lips	12	
,, ,, chancres on the tongue	3	
,, ,, chancres on the nose	1	
,, ,, chancres on the pituatary membrane .	1	
,, ,, chancres on the eyelids	1	
,, ,, chancres on the fingers	1	1
,, ,, chancres on the leg*	1	

This table contains some very significative results.

1. It establishes, in a demonstrative manner, the frequency of certain chancres, which are generally regarded as extremely rare or entirely exceptional. Such are, in the first place, the intra-urethral chancres. Out of 824 chancres, we find twenty seated in the urethra, and at a sufficient distance to prevent their being perceived by the forced separation of the lips of the meatus urinarius.† I must add, that this number is below the true medium; for in those cases in which a chancre, situated in an easily accessible region, exists simultaneously with a chancre in the urethra, the latter often runs the risk of passing unperceived. Next to the chancres in the urethra, we have the chancres on the face, lips, tongue, etc.—regions in which the existence of the primitive affections was, not long ago, in the eyes of certain syphilographs, regarded as a matter of doubt. The preceding table shows that chancres in these regions are far from being rare.

2. It will be observed, that simple chancres on the integuments of the penis are of rare occurrence. It is this very rareness which has caused many syphilographs of great merit to believe and say that all chancres situated on the

* My colleague, M. Poisson, has observed this year a chancre on the foot. This chancre was seated in the groove between the fourth and fifth toes. It furnished, by inoculation, the specific pustule.—A. F.

† I may remark, that I only refer here to intra-urethral chancres, that cannot be seen from without. I have established a separate division for the chancres of the meatus.

integuments of the penis produce syphilis. It is true that we find far more often on the integuments of the penis ulcerations with a *parcheminé* base, than we do ulcerations with a soft base. We cannot account for this difference; but in all cases it would be erroneous to attribute it to a kind of reaction of the locality on the nature of the chancre; for, according to this hypothesis, all chancres situated in this region must inevitably present the same character as an initial form, and be followed by the same manifestations. Now, the preceding numbers protest against any such uniformity.

3. The same may be said of chancres on the fingers, to which certain practitioners attribute a DECIDED infecting power. Out of two cases observed, we find one for each variety of chancre.

4. Induration being difficult to appreciate on the anus, it was believed that this locality was exempt from it, and that chancres seated in this region might be accompanied by constitutional affections, without being invested with this *necessary* form of all ulcerations of an infecting nature. Our table will prove that even in this region induration does not escape the skilful hand of M. Ricord.

5. Finally, the few examples we have cited of chancres seated in singular localities (on the nose, the pituatary membrane, the leg, etc.) will prove, once more, that there is no region in which the primitive affection cannot implant itself; and that in those cases of syphilis in which NO CHANCRE is met with on the penis, the negation of a chancre as the prelude of the diathesis can only be acceptable after a general examination of the most minute kind. This is what Fernel said, "Omnes partes adeundæ, à quibus initium habere potest, etc."—FOURNIER.

NOTE VI.

MEDIATE CONTAGION.—*M. Cullerier.*

There is a mode of contagion of syphilis on which authors do not agree, and the authenticity of which, admitted by some, suspected by others, had never yet received the definitive sanction of a methodic and strict experimentation. I mean, MEDIATE CONTAGION. It is to throw some light on this point of science, that M. Cullerier has undertaken the experiments to which our Professor has alluded, and which will be reproduced in this note.

"All practitioners," says M. Cullerier, "and especially those who devote themselves entirely to syphilis, are often consulted by patients affected with chancres contracted from women who, when submitted to the most careful examination, do not present anything which could have given rise to the contagion. This is a case of common occurrence, and which must have been far more frequent when the speculum was not, as it is now-a-days, indispensably applied to the search of venereal affections in women. Let us suppose that a patient affirms that he has contracted chancres from a suspicious person, a prostitute, for example; that is to say, from a woman who may, within a very short space of time, have had connexion with several men whose state of health she ignores. No ulceration is to be found upon her; not the slightest trace of a recent fissure; not the slightest abnormal redness. Can we under such circumstances suppose that this woman has received, from one of the first men with whom she had connexion, the syphilitic principle, which she transmitted to another, without herself undergoing its influence, without the mucous membrane on which the virulent liquid was deposited opening as it were a gate capable of admitting it into the economy, or, at all events, without manifesting locally its presence? In one word, can this woman have served

the purpose of a simple vehicle, and produced, without her knowledge, a mediate contagion?

"The following are the experiments I undertook upon this subject:—

"Louise Vaudet, aged 16, entered the Hospital of Lourcine, Ward of St. Mary, No. 9, on the 10th of October, 1848. She bore on each thigh an ulceration with a grey floor and abrupt edges. The disease dated a month. She had not been treated; and on entering the hospital, she was affected with a violent inflammation of the skin covering the abdomen and the upper part of the thighs, which had been brought on by walking.

Ordered, baths, poultices, rest (in bed) during several days. When the examination of the genital organs could be made, no ulceration could be detected, either on the vulva or on the anus. The vagina was red,—it was the seat of an abundant muco-purulent secretion, but without any ulcerations; the neck of the uterus was healthy. Dressing of the chancrous ulcerations on the thighs with lint soaked in aromatic wine; injections *per vaginam* with a solution of alum. Six weeks after the patient had entered the hospital, the ulcerations diminished by one-half, and the vaginitis was notably improved. On the 25th of November, after having ascertained beyond a doubt that the mucous membrane of the vulva and vagina was not ulcerated in any part, and that the discharge obtained from these parts was not inoculable, I collected upon a spatula the pus produced by one of the inguinal chancres, and laid it, in sufficiently large quantities, in the vagina. I made the patient walk up and down during thirty-five minutes, taking care to watch her so that she might not place her hand on the vulva. After this lapse of time, I placed upon a lancet a certain quantity of the vaginal secretion, and I inoculated with it one of the patient's thighs. I then washed with water the vagina and vulva; I carefully wiped the parts, and then washed them again with a strong

solution of alum. Forty-eight hours after, the puncture of inoculation had produced the characteristic pustule. I left it till next day, so that the experiment might be more certain, and then destroyed it with Vienna caustic. Nothing whatsoever appeared in the vagina; the inflammation was not increased; and after two months, the patient quitted the hospital perfectly cured of the vaginitis, as well as of the inguinal ulcerations.

"The second experiment was made upon Celestine X——, aged 24, who entered Loureine, Ward of St. Louis, No. 7, on the 28th November, 1848. She bore on the left thigh an ulcerated bubo, of two months' date, and which, according to her, had succeeded to a pimple, which had only lasted for a few days, and which was seated on the internal surface of one of the labia majora. At the time of her admission into the hospital, no trace could be discovered of this pimple. The vulva, the vagina, the neck of the uterus, and the anus, were all in a perfectly normal state. The aspect of the ulceration on the thighs made me suppose that it was specific. On the day following, the 29th, the pus proceeding from the bubo was placed upon a spatula, and laid in the vagina, care being taken to carry it as high as possible. The patient was then made to walk for about an hour, without knowing she was the object of an experiment. She was then taken back to bed, and I then collected as much as I could of the vaginal humours, remarking to some pupils and young colleagues who surrounded me, that none of the pus introduced into the vagina could be seen, and that what I had on my lancet was entirely similar to the normal mucus. I inoculated one of the thighs, using the same precautions in washing as I did in the former case. After two days, the characteristic pustule rose, and I only destroyed it after forty-eight hours. The vulva, vagina, and neck of the uterus were carefully observed during several days, but nothing appeared; the disease restricted itself to the thigh. (I must not

neglect to say, that although there was no sign of disease in the interior of the organs of generation, yet I made on the same day an inoculation with the mucus with which they were covered, and obtained a negative result.)

"These two experiments clearly prove that mediate contagion through the medium of the vagina—a contagion which up till now has been regarded as barely possible—is now a fact acquired to science; and what was but a supposition now becomes a certainty." (Consult, for further details, M. Cullerier's Memoir, "Quelques Points de la Contagion Médiate," etc., and "Mémoires de la Société de Chirurgie.")

I shall only add a few words to the convincing experiments of M. Cullerier, that it may be remarked that mediate contagion met with far less unbelievers in the preceding centuries than it has in our times. M. Cullerier has already signalized it in the writings of Wideman, Fernel, Thierry de Héry, etc. I have also found it mentioned, in the most formal manner, by Georgius Vella, Nicolas de Blègny, and others. Wideman, one of the first authors who wrote on Syphilis, had already a very clear idea of mediate contagion. He says, "We must avoid with the greatest care any connexion with an infected woman, and still more with a healthy woman who has had connexion but a short time before with a diseased man. In fact, in this latter condition, experience has proved that the individual who succeeds the infected lover is in danger of contagion."

Georgius Vella is still more explicit:—"Novi mulieres sanas quæ coïverunt cum infectis, in quas tale genus ægretudinis non transivit, et tamen transivit in viros alios coeuntes cum illis." Fernel also admits this mode of contagion:—"Hauritur etiam interdum lues à scorto quod nondum sit inquinatum, cum quis eum eo volutatur, mox ab alio impuro seortatore" (De Luis Venereæ Curatione, chap. iv.). Thierry de Héry says the same, as well as Ambroise Paré, who, as it is well known, borrowed nearly the whole of his 16th book,

"De la Grosse Vérole," from this surgeon. In 1673 Nicolas de Blégny wrote the following remarkable passage :—"Some women who have been found healthy have, nevertheless, infected the men with whom they had connexion. . . A woman may receive the semen of an impure man, and shortly afterwards have intercourse with another, to whose penis this corrupted matter may adhere, and make an evil impression, although this very same woman may throw out all she has received from the one, as well as from the other, without being in the least affected by it"—("L'art de guérir les Maladies Vénériennes"). Astruc likwise believed in mediate contagion :—"Mulieres quæ cum infectis rem habuerunt dicuntur morbum communicasse cum aliis viris, licet ipsæ infectæ non fuerint." Swédiaur seized upon this idea, and expressed it in several parts of his work, with a kind of predilection. Also, after what he says, there is truly nothing more to be added to this subject. "A person," says he, "whether a man or a woman, who has had syphilitic virus lodged on the organs of generation may infect another person, and transmit to that person a gonorrhœa or a syphilitic ulcer, *without being himself affected in the slightest degree by the disease.* In order thoroughly to understand this paradox, we must remember that the syphilitic virus, applied to any part of a healthy person, must remain there for a certain time before it can produce any visible effect, that is to say, a gonorrhœa or an ulcer. Now, if it is taken away in time, either by chance or by washing, it will not produce any effect upon this part; or, if it is carried off during coitus by a healthy person, before it has had time to act upon the part on which it was lodged, *this person alone will be exposed to infection, and become diseased, whilst the other will remain healthy.* Examples of this kind are now-a-days frequently met with in practice." In our times this doctrine has met with more incredulity. Notwithstanding the teaching of M. Ricord, notwithstanding the conclusive experiments of M. Cullerier,

we cannot deny that mediate contagion is still considered to be a hazardous hypothesis, often taken advantage of by patients who are anxious to dissimulate the true source of their infection. Some admit it; others reject it entirely; the greater number suspect it, without attacking it, and remain undecided, ready, however, at any moment, to become hostile to it. And yet clinical observation has spoken; the testimony of the most celebrated ancient as well as modern authors uphold this doctrine; and the lancet itself justifies it, by adding the authority of an experimental demonstration.—Fournier.

M. Ricord expresses himself as follows upon this point, in his "Traité des Maladies Vénériennes" (p. 98):—"It is an incontestable fact, that women who have had connexion with infected men, and subsequently with healthy men, without becoming diseased themselves, may have infected the latter, they themselves being only the vehicle . . . . . The following is a case which recently came under my observation:—A young man had intercourse with a woman affected with chancres; on the same day he had intercourse with his habitual mistress, who became affected with the same disease; *he, however, remaining entirely exempt from its effects.* It must be remarked, that the young man did not wash after the coitus, and that he had an extremely long prepuce."

M. Puche has communicated to me a case analogous to the preceding one. It is the following:—"A young girl marries a young man, who, by this marriage, becomes rich. The young man, during the first days of his marriage, meets a former mistress, and has connexion with her. *Immediately afterwards,* he returns home and renews the coitus with his wife. After the lapse of a few days, a chancre manifests itself upon this lady. This chancre indurates, and becomes the origin of a constitutional syphilis of the most serious kind. The husband is not affected by the disease! This

young man had an extremely long prepuce, and had not washed after the first coitus. As to his wife, no suspicion of infidelity could be entertained against her." I have myself, during the course of this year, witnessed a case very similar to the preceding one. There are, no doubt, in practice, *exceptional* cases; but their rareness, however, should not render them doubtful. They prove, as M. Cullerier has said, that if scepticism, in general, ought to be applied to the etiology of venereal affections, there are circumstances in which we must depart from the general rule, so that we may follow nature along the numerous paths she may open to contagion.

NOTE VII.

SERPIGINOUS CHANCRE, PRODUCING, IN THE FOURTH YEAR OF ITS EXISTENCE, A BUBO OF ABSORPTION, WITH INOCULABLE PUS.

X——, aged 39, having a well-marked bilious lymphatic temperament, a postilion, enters the Midi on the 12th of October, 1837. Three years ago (1834), this patient had been admitted into the Hospital of Moulins, for a chancre on the penis, followed by bubos. During the course of treatment to which he was submitted, two small ulcerations manifested themselves, one near the left thigh, the other near the anus (accidental inoculations). These two ulcerations spread; finally, their progress continuing, they became united at the fold of the thigh, after having surrounded the scrotum; from thence they extended themselves over the greater part of the hypogastric region. The patient was subjected to various treatment, especially to repeated cauterizations and the use of the liquor of Van Swiéten. He was at times better, at others worse; at times the sores partly cicatrized; at others, on the contrary, the ulcerations invaded fresh portions of the integuments. Three years passed away, without any amelioration.

In January, 1857, that portion of the ulcer which occupied the hypogastric region had commenced to cicatrize; but, on the other hand, the anal ulceration had made rapid strides; it soon invaded the whole perineum, and extended itself even to the right buttock. When I saw the patient in October, I found him as follows:—the centre of the right buttock was occupied by a series of small ulcers; the ischiatic part of the buttock presented a large, isolated ulceration, with a greyish floor, and with abrupt and hardened edges; a third, ribbon-like ulceration, two inches in length, was situated on the perineum; a fourth surrounded the anus on the right side; whilst a fifth, deeper than the preceding ones, long and narrow, with approximated edges, giving it the appearance of a fistulous canal, extended from the root of the penis, surrounded the scrotum, and terminated at a few lines from the perineal ulceration. General health good; skin dry. The chloride of gold is administered to the patient. I successively employed, in the hope of modifying the sore, cauterization with a red-hot iron, the caustic of Récamier, lotions with the nitrate of silver, creosote, corrosive sublimate, etc. But I recognised beyond a doubt, that of all the applications carded cotton was that which had the most favourable effect in modifying the sores. In January, 1838, the state of the patient was notably improved; the sores had contracted, and the work of cicatrization was progressing favourably. In February, a single ulceration existed; suddenly it spread without provocation, without any appreciable cause. I cauterized it deeply with a red-hot iron; the ulceration assumed a better aspect; but towards the 22nd of March, the cicatrix opened on one point. The patient at the same time complained of a violent pain in the right groin, which already presented a considerable swelling. In each of the three following days, twenty leeches were applied to this swelling, which had assumed the character of a bubo. On the 25th, the antiphlogistics having been of no avail, and the tumour

presenting a deep fluctuation, I decided upon practising in the centre of the adenitis a perpendicular puncture. A copious quantity of pus flows from it, which is immediately inoculated in the upper and internal surface of the right thigh. On the 4th of April, the inoculation has produced an ecthymatous pustule, which is surrounded by an inflammatory areola. This pustule ulcerates deeply. The skin covering the inguinal abscess is undermined to a great extent. Extension of the former ulcerations. On the 18th, application of the Vienna paste to the bubo and to the chancre of inoculation. Dressing of the sores with chloride of sodium dissolved in five parts of water. In August, under the influence of this treatment, the state of the ulcers is considerably improved; the sores on the perineum, which had again opened, cicatrized entirely; those on the buttock and in the groin were reduced to the size of a sixpence, and furnished but a slight discharge; the ulcer of inoculation closed. In September fresh complications; spontaneous gangrene of the scrotum; rupture of the cicatrices of the perineum, buttock, and groin. Simple dressings with carded cotton; tonics. In February, complete cicatrization of all the ulcerations. X—— quitted the hospital in a good state of health.—P. Puche.

NOTE VIII.

ON THE COMPARATIVE INOCULATION OF THE TWO SPECIES OF CHANCRE.

According to M. Ricord's desire, I publish the following account of the inoculations practised during the course of this year at the Hôpital du Midi.

1. SIMPLE CHANCRES.

First series; simple chancres, developed on patients free from any former affection.

1. Chancre on the integuments of the penis; ulceration,

large and deep; period of increase. Inoculation on the thirty-eighth day;* positive result.

2. Chancre on the prepuce: the surface of these chancres is of a rose colour; reparation commencing; nearly dry (no hope of obtaining a positive inoculation). Inoculation on the sixtieth day; positive result.

3. Chancre on the prepuce; stationary period. Inoculation on the forty-second day; positive result.

4. Chancre on the prepuce, cauterized on several occasions with nitrate of silver; greyish pseudo-membranous surface; stationary period. Inoculation on the twenty-second day; positive result.

5. Chancre on the prepuce; period of reparation. Inoculation on the eighteenth day; negative result.

6. Chancre on the frænum; period of reparation commencing. Inoculation on the fifty-third day; positive result.

7. Chancre on the frænum; stationary period. Inoculation on the fortieth day; positive result.

8. Chancre on the frænum; surface of the ulceration red; reparation commencing. Inoculation on the eighth day; positive result.

9. Chancre on the prepuce; stationary period. Inoculation on the forty-fifth day; positive result.

10. Chancre on the prepuce; stationary period. Inoculation on the thirty-seventh day; positive result.

11. Chancre on the prepuce, cauterized with nitrate of silver† a few minutes before the inoculation; stationary period. Inoculation on the twenty-first day; positive result.

* The age of a chancre may be determined in two ways:—first, according to the epoch of the contagion; second, according to the epoch of the manifestation of the ulcer. The first method is less likely to lead into error; it has been adopted by a great number of syphilographs, especially by M. Ricord. M. Puche has likewise given it the preference in the statistics that I have cited.

† This case shows that nitrate of silver cannot be relied upon, to destroy the chancrous virus.—C. F. M.

12. Chancre on the prepuce; period of reparation. Inoculation on the twelfth day; negative result.

13. Chancre on the corona; period of reparation far advanced. Inoculation on the fourteenth day; positive result.

14. Chancre on the corona; stationary period. Inoculation on the seventeenth day; positive result.

15. Chancre on the prepuce; period of reparation. Inoculation on the twenty-second day; positive result.

16. Chancre on the prepuce; stationary period. Inoculation on the twenty-fifth day; positive result.

17. Chancre on the prepuce; period of increase. Inoculation on the twenty-fourth day; positive result.

18. Chancre on the glans; stationary period. Inoculation on the thirty-fifth day; positive result.

19. Chancre on the prepuce; stationary period. Inoculation on the twenty-ninth day; positive result.

20. Chancre on the frænum; stationary period. Inoculation on the twenty-ninth day; positive result.

21. Chancre on the corona; period of transition. Inoculation on the twenty-ninth day; positive result.

22. Chancre on the glans; stationary period. Inoculation on the thirtieth day; positive result.

23. Chancre on the frænum; stationary period. Inoculation on the twenty-seventh day; positive result.

24. Chancre on the frænum; stationary period. Inoculation on the twenty-fourth day; positive result.

25. Chancre on the prepuce; period of transition. Inoculation on the forty-eighth day; positive result.

26. Chancre on the prepuce; period of reparation far advanced. Inoculation on the thirtieth day; negative result.

27. Chancre on the prepuce; stationary period. Inoculation on the eleventh day; positive result.

28. Chancre on the prepuce; stationary period. Inoculation on the thirty-first day; positive result.

29. Chancre on the corona; raised "bourgeonnant," re-

sembling a mucous papule; period of reparation. Inoculation on the twenty-fifth day; positive result.

30. Chancre on the prepuce; stationary period. Inoculation on the twenty-first day; positive result.

31. Pus taken from under a scab resulting from a cauterization. Inoculation on the sixth day; negative result.

32. Chancre on the corona; stationary period. Inoculation on the twenty-fourth day; positive result.

33. Chancre on the prepuce; period of reparation. Inocution on the twenty-ninth day; negative result.

34. Chancre on the prepuce; cicatrization far advanced. Inoculation on the forty-eighth day; negative result.

35. Chancre on the prepuce; stationary period. Inoculation on the twenty-fifth day; positive result.

36. Chancre on the prepuce; stationary period. Inoculation on the twenty-fifth day; positive result.

37. Chancre on the corona; stationary period. Inoculation on the twenty-second day; positive result.

38. Chancre on the prepuce; period of reparation extremely far advanced; the surface of the chancre is almost dry. (No hope of success.) Inoculation on the sixty-third day; positive result.

39. Chancre on the prepuce; period of reparation. Inoculation on the forty-eighth day; positive result.

40. Chancre on the prepuce; period of reparation commencing. Inoculation on the eleventh day; positive result.

41. Chancre on the prepuce; stationary period. Inoculation on the thirty-fourth day; positive result.

42. Chancre on the prepuce; stationary period. Inoculation on the twenty-seventh day; positive result.

43. Chancre on the prepuce; period of reparation very far advanced; surface of the chancre of a rose colour, and almost dry. Inoculation on the twenty-third day; negative result.

44. Chancre on the prepuce; ultimate period. Inoculation on the twenty-fourth day; positive result.

45. Chancre on the frænum; stationary period. Inoculation on the forty-eighth day; positive result.

46. Chancre on the corona; stationary period. Inoculation on the twenty-fifth day; positive result.

47. Chancre on the prepuce; stationary period. Inoculation on the fiftieth day; positive result.

48. Chancre on the prepuce; stationary period. Inoculation on the thirty-first day; positive result.

49. Chancre on the prepuce; stationary period. Inoculation on the twenty-sixth day; positive result.

50. Chancre on the prepuce; superficial ulceration, even, and of a rose colour; period of reparation advanced. Inoculation on the twenty-first day; positive result.

51. Chancre on the prepuce. Inoculation practised on the fifth day, with the serosity collected on the ulceration; positive result.

52. Chancre on the prepuce; period of reparation commencing. Inoculation on the sixtieth day; positive result.

53. Chancre on the frænum; stationary period. Inoculation on the twenty-first day; positive result.

54. Chancre on the corona; stationary period. Inoculation on the fourteenth day; positive result.

55. Chancre on the corona; period of reparation very far advanced. Inoculation on the eighteenth day; negative result.

56. Chancre on the corona; of a gangrenous form. Inculation on the eleventh day; negative result.

57. Chancre on the prepuce; stationary period. Inoculation on the twenty-second day; positive result.

58. Chancre on the prepuce, vegetating and raised, having the aspect of a mucous papule. Inoculation on the twenty-second day; positive result.

59. Chancre on the corona; ultimate period. Inoculation on the thirty-first day; positive result.

60. Chancre on the frænum; period of reparation far advanced. Inoculation on the thirtieth day; positive result.

61. Chancre on the corona; period of reparation far advanced. Inoculation on the fourteenth day; negative result (pseudo-pustule, which spontaneously disappeared in a few days).

62. Chancre on the integuments of the penis; stationary period. Inoculation on the thirty-eighth day; positive result.

63. Chancre on the prepuce; period of reparation. Inoculation on the twenty-first day; positive result.

64. Chancre on the glans; stationary period. Inoculation on the twenty-sixth day; positive result.

65. Chancre on the prepuce; period of transition. Inoculation on the twenty-sixth day, after repeated cauterizations of the chancre with nitrate of silver; positive result.

66. Chancre on the frænum; period of reparation. Inoculation on the forty-seventh day; positive result.

67. Chancre on the corona; stationary period. Inoculation on the twenty-first day; positive result.

68. Chancre on the prepuce; stationary period. Inoculation on the thirty-fifth day; positive result.

69. Chancre on the corona; period of reparation commencing. Inoculation on the thirty-first day; positive result.

70. Chancre on the prepuce; stationary period. Inoculation on the sixty-third day; positive result.

71. Chancre on the corona; stationary period. Inoculation on the sixty-first day; positive result.

72. Chancre on the prepuce; stationary period. Inoculation on the thirtieth day; positive result.

73. Chancre on the corona; stationary period. Inoculation on the twenty-first day; positive result.

74. Chancre on the prepuce; stationary period. Inoculation on the twenty-fifth day; positive result.

75. Chancre on the prepuce; period of reparation. Inoculation on the twenty-second day; positive result.

76. Chancre on the frænum; stationary period. Inoculation on the sixteenth day; positive result.

77. Chancre on the prepuce; stationary period. Inoculation on the twenty-ninth day; positive result.

78. Chancre on the corona; period of reparation. (Raised ulcer, *ulcus elevatum*, resembling a mucous papule.) Inoculation on the thirty-fifth day; positive result.

79. Chancre on the prepuce; stationary period. Inoculation on the twenty-fourth day; positive result.

Second series; chancres with a soft base, developed upon individuals previously affected with constitutional syphilis.

80. Chancre on the prepuce; stationary period. Inoculation on the eighteenth day; positive result. (At the time when this chancre was inoculated, the patient was still affected with syphilitic manifestations; anal mucous aphthæ; post-cervical adenopathy, etc.).

81. Chancre on the prepuce; stationary period. Inoculation on the eighteenth day; negative result.

82. Chancre on the prepuce; period of transition. Inoculation on the twenty-first day; negative result. (At the time of inoculation, the patient was affected with an erythematous roseola, which was disappearing.)

83. Chancre on the frænum; stationary period. Inoculation on the fourteenth day; negative result. (At the time of inoculation, the patient still presented syphilitic affections, buccal mucous aphthæ and brownish macules on the abdomen.)

84. Chancre on the prepuce; period of reparation. Inoculation on the twenty-third day; positive result.

85. Chancre on the prepuce; stationary period. Inoculation on the twenty-fifth day; positive result. (At the time of inoculation, the patient was affected with labial mucous aphthæ.)

86. Chancre on the prepuce; stationary period. Inoculation on the thirty-fourth day; positive result.

87. Chancre on the corona; stationary period. Inoculation on the twenty-fourth day; negative result.

88. Chancre on the prepuce; period of reparation far advanced. Inoculation on the fortieth day; positive result; (suppurating inguinal adenitc).

89. Chancre on the prepuce; period of reparation. Inoculation on the thirty-fifth day; positive result.

90. Chancre on the prepuce; stationary period. Inoculation on the thirty-first day; negative result. (At the time of inoculation, roseola and post-cervical adenopathy.)

91. Chancre on the prepuce; stationary period. Inoculation on the thirty-third day; positive result.

2. INDURATED CHANCRES.

92. Chancre on the prepuce; stationary period. Inoculation on the twenty-first day; negative result. (Consecutive affections of constitutional syphilis; roseola; labial aphthæ.)

93. Chancre on the corona; stationary period. Inoculation on the sixticth day; negative result.

94. Chancre on the corona, of a gangrenous form. Inoculation on the twenty-eighth day; negative result. (Constitutional affections; roseola; anal aphthæ.)

95. Chancre in the urethra; abundant inflammatory pus. Inoculation on the seventeenth day; negative result.

96. Labial chancre; stationary period. Inoculation on the thirtieth day; negative result. (Constitutional affections; erythematous syphilidis; multiple mucous aphthæ.)

97. Chancre on the corona; stationary period. Inoculation on the thirticth day; negative result.

98. Chancre on the corona; stationary period. Inoculation on the thirtieth day; negative result.

99. Chancre on the corona; stationary period. Inoculation on the sixteenth day; negative result.

100. Chancre on the prepuce; stationary period. Inoculation on the sixtieth day; negative result. (Consecutive affections; roseola.)

101. Chancre on the integuments of the penis, of a phagedænic form; period of increase. Inoculation on the sixtieth day; negative result. (Consecutive affections; roseola; aphthæ; ecthymatous syphilidis; rupia, with a phagedænic tendency.)

102. Chancre on the corona, of a gangrenous phagedænic form; period of increase. Inoculation on the seventieth day; negative result.

103. Chancre on the integuments of the penis; stationary period. Inoculation on the twenty-ninth day; negative result. (Consecutive affections; aphthæ.)

104. Chancre on the integuments of the penis, of a phagedænic form; period of increase. Inoculation on the fifty-fifth day; negative result. (Consecutive affections; papular syphilidis; rheumatoid pains.)

105. Chancre on the corona; period of transition. Inoculation on the sixty-fourth day; negative result. (Consecutive affections; roseola; sore throat.)

106. Chancre on the frænum; period of reparation. Inoculation on the forty-sixth day; negative result. (Consecutive affections; papular syphilidis.)

107. Chancre on the corona, of a gangrenous form. Inoculation on the forty-sixth day; negative result.

108. Urethral chancre; serous pus, ill-formed. Inoculation with the urethral pus on the thirty-eighth day; negative result. (Consecutive affections; roseola; alopecia.)

109. Chancre on the meatus; stationary period. Inoculation on the forty-ninth day; negative result. (Consecutive affections; roseola; aphthæ.)

110. Chancre in the peno-scrotal fold; stationary period. Inoculation on the sixteenth day; negative result.

111. Chancre on the corona; stationary period. Inoculation on the sixteenth day; negative result.

112. Chancre on the integuments of the penis; stationary period. Inoculation on the tenth day; negative result. (Consecutive affections; impetiginous syphilidis; cervical adenopathy.)

113. Chancre on the corona; stationary period. Inoculation on the seventy-first day; negative result.

114. Chancre on the corona; period of transition. Inoculation on the fifty-ninth day; negative result. (Consecutive affections; roseola; scabby eruption on the scalp; cervical adenopathy.)

115. Chancre on the prepuce; stationary period. Inoculation on the twenty-ninth day; negative result.

116. Chancre on the glans; period of transition. Inoculation on the thirty-first day; negative result.

117. Chancre on the glans; period of increase. Inoculation on the hundredth day; negative result. (Consecutive affections; impetiginous syphilidis; posterior cervical adenopathy.)

118. Chancre on the meatus; period of transition. Inoculation on the ninetieth day; negative result. (Consecutive affections; roseola; sore throat.)

119. Chancre on the integuments of the penis; period of transition. Inoculation on the sixtieth day; negative result. (Consecutive affections; roseola; aphthæ.)

120. Chancre on the corona; stationary period. Inoculation on the fiftieth day; negative result. (Consecutive affections; roseola; aphthæ in the mouth.)

121. Chancre on the prepuce; stationary period. Inoculation on the thirty-fifth day; negative result. (Consecutive affections; aphthæ; palmar and plantar psoriasis.)

122. Chancre on the corona; gangrenous. Inoculation on the forty-second day; negative result.

123. Chancre on the corona; period of reparation. Inoculation on the thirty-fifth day; negative result.

124. Chancre on the corona; period of reparation. Inoculation on the sixtieth day; negative result.

125. Chancre on the corona; period of reparation. Inoculation on the fortieth day; negative result. (Consecutive affections; roseola; aphthæ.)

126. Chancre on the corona; period of transition. Inoculation on the twenty-fifth day; negative result. (Consecutive affections; roseola.)

127. Chancre on the prepuce; stationary period. Inoculation on the sixteenth day; negative result. (Consecutive affections; papular syphilidis; aphthæ.)

128. Chancre on the integuments of the penis; period of reparation. Inoculation on the sixtieth day; negative result.

129. Chancre on the prepuce; stationary period. Inoculation on the twelfth day; negative result.

130. Chancre on the corona; stationary period. Inoculation on the thirty-fifth day; negative result. (Consecutive affections; roseola; sore throat; cervical adenopathy.)

131. Chancre on the integuments of the penis; serpiginous phagedænism; period of increase. Inoculation on the ninetieth day; negative result. (Consecutive affections; roseola; alopecia.)

132. Chancre on the meatus; stationary period. Inoculation on the eighteenth day; negative result.

133. Chancre on the prepuce; period of transition. Inoculation on the sixtieth day; negative result.

134. Chancre on the corona; stationary period. Inoculation on the thirtieth day; negative result. (Consecutive affections; papular syphilidis; cervical adenopathy.)

135. Chancre on the prepuce; period of transition. Inoculation on the fifty-first day; negative result. (Consecutive affections; papular syphilidis; aphthæ.)

136. Chancre on the meatus; period of increase. Inocu-

lation on the fourteenth day; negative result. (Consecutive affections; roseola; aphthæ.)

137. Chancre on the corona; stationary period. Inoculation on the thirtieth day; negative result. (Consecutive affections; aphthæ.)

138. Chancre on the frænum; stationary period. Inoculation on the thirtieth day; negative result. (Consecutive affections; papular syphilidis; iritis; ecthymatous syphilidis; rupia.)

139. Chancre on the prepuce; stationary period. Inoculation on the twenty-second day; negative result.

140. Chancre on the corona, of a gangrenous form; stationary period. Inoculation on the twenty-sixth day; negative result.

141. Chancre on the corona; period of transition. Inoculation on the fifty-third day; negative result.

142. Chancre on the corona; period of increase. Inoculation on the twenty-second day; negative result. (Consecutive affections; papular roseola; aphthæ.)

143. Chancre on the integuments of the penis; stationary period. Inoculation on the twenty-seventh day; negative result. (Consecutive affections; roseola; alopecia; cervical adenopathy.)

144. Chancre on the integuments of the penis; stationary period. Inoculation on the thirty-sixth day; negative result.

145. Chancre on the integuments of the penis; stationary period. Inoculation on the thirty-ninth day; negative result. (Consecutive affections; roseola; aphthæ.)

146. Chancre on the prepuce; stationary period. Inoculation on the twenty-first day; negative result.

147. Chancre on the prepuce; stationary period. Inoculation on the thirty-first day; negative result.

148. Chancre on the corona; stationary period. Inoculation on the sixty-first day; negative result. (Consecutive affections; roseola; papular syphilidis.)

149. Chancre on the corona; stationary period. Inoculation on the twenty-second day; negative result.

150. Chancre on the glans; period of transition. Inoculation on the eightieth day; negative result. (Consecutive affections; roseola; cephalæa; secondary balanitis, etc.)

151. Chancre on the integuments of the penis; period of increase. Inoculation on the nineteenth day; negative result.

152. Chancre on the corona, gangrenous. Inoculation on the sixtieth day; negative result.

153. Chancre on the glans; period of reparation far advanced. Inoculation on the sixty-fifth day; negative result.

154. Chancre on the prepuce; period of reparation. Inoculation on the forty-second day; negative result. (Consecutive affections; roseola; cephalæa; alopecia.)

155. Chancre on the glans; serpiginous phagedænism; stationary period. Inoculation on the ninety-fifth day; negative result. (Consecutive affections; roseola; aphthæ.)

156. Chancre on the prepuce; period of reparation. Inoculation on the seventy-sixth day; negative result. (Consecutive affections; roseola; aphthæ.)

157. Chancre on the integuments of the penis; period of increase. Inoculation on the forty-fifth day; negative result.

158. Chancre on the glans; stationary period. Inoculation on the sixtieth day; negative result.

159. Chancre on the prepuce; stationary period. Inoculation on the fiftieth day; negative result. (Consecutive affections; roseola; cephalæa.)

160. Chancre on the corona; stationary period. Inoculation on the sixty-fifth day; negative result.

161. Chancre on the prepuce; stationary period. Inoculation on the thirty-eighth day; negative result.

162. Chancre on the glans; stationary period. Inoculation

on the thirtieth day; negative result. (Consecutive affections; roseola; alopecia; cervical adenopathy.)

163. Chancre on the prepuce; stationary period. Inoculation on the twentieth day; negative result.

164. Chancre on the prepuce; stationary period. Inoculation on the twenty-first day; negative result. (Consecutive affections; vesico-pustular syphilidis; iritis.)

165. Chancre on the frænum; stationary period. Inoculation on the twentieth day; negative result. (Consecutive affections; papular syphilidis; alopecia.)

166. Chancre on the integuments of the penis; period of increase. Inoculation on the fifty-eighth day; negative result. (Consecutive affections; roseola; secondary balanitis.)

167. Chancre on the prepuce; stationary period. Inoculation on the forty-first day; negative result. (Consecutive affections; papular syphilidis; aphthæ.)

168. Chancre on the prepuce; period of transition. Inoculation on the sixtieth day; negative result.

169. Chancre on the integuments of the penis; phagedænic tendency. Inoculation on the forty-first day; negative result. (Consecutive affections; ecthymatous syphilidis; alopecia.)

170. Chancre on the integuments of the penis; stationary period. Inoculation on the twenty-eighth day; negative result. (Consecutive affections; papular syphilidis; iritis; rupia, etc.)

171. Chancre on the corona; period of increase. Inoculation on the twentieth day; negative result.

172. Chancre on the scrotum; period of increase. Inoculation on the sixteenth day; negative result.

173. Chancre on the prepuce; period of transition. Inoculation on the hundred and twentieth day; negative result. (Consecutive affections; roseola; aphthæ; iritis; alopecia.)

174. Chancre on the corona; stationary period. Inocu-

lation on the thirty-fifth day; negative result. (Conseeutive affections; roseola; aphthæ.)

175. Chanere on the eorona; period of transition. Inoculation on the twenty-second day; negative result. (Conseeutive affections; roseola; aphthæ.)

176. Chancre on the prepuce; period of transition. Inoculation on the thirtieth day; negative result.

177. Chancre on the corona; stationary period. Inoculation on the fiftieth day; negative result.

178. Chancre on the prepuce; period of transition. Inoculation on the fortieth day; negative result.

179. Chancre on the eorona; stationary period. Inoculation on the forty-third day; negative result. (Conseeutive affections; aphthæ.)

180. Chancre on the prepuce; stationary period. Inoculation on the thirty-sixth day; negative result.

181. Labial ehanere; stationary period. Inoculation on the fortieth day; negative result. Consecutive affections; roseola; alopeeia.)

182. Urethral ehancre; abundant purulent discharge. Inoculation on the eleventh day; negative result.

183. Chanere on the glans; stationary period. Inoculation on the thirtieth day; negative result.

184. Labial chanere; stationary period. Inoculation on the twenty-ninth day; negative result. (Conseeutive affeetions; roseola; aphthæ.)

185. Chancre on the corona; period of reparation. Inoculation on the thirty-ninth day; negative result. (Consecutive affeetions; roscola; alopecia.

186. Chanere on the integuments of the penis; stationary period. Inoculation on the fifteenth day; negative result. (Consecutive affections; roscola; aphthæ.

187. Chancre on the eorona; stationary period. Inoculation on the twentieth day; negative result.

188. Chanere on the integuments of the penis; stationary period. Inoculation on the twenty-second day; negative result.

189. Urethral chanere; sero-purulent discharge. Inoculation on the forty-seeond day; negative result. (Conseeutive affeetions; roseola; aphthæ; alopeeia.)

190. Chanere on the eorona, dating a few days (the patient eannot define its origin with preeision); period of inerease. Inoculation furnishes the specifie pustule.

Let us now examine this long enumeration. And, firstly, let us lay aside the chancres developed on previously infected individuals—hybrid uleerations, on the nature of whieh syphilographs do not agree, and which might give rise to numerous doetrinal diseussions. So that we shall only have to eompare the results of inoculation on virgin subjeets. The following is the result of these experiments:—

1. *Inoculations of Simple Chancres.*

	Number of inoculations.	Positive results.	Negative results.
Simple chancres at the period of increase	2	2	0
,, at the stationary period	44	44	0
,, at the period of transition . . .	9	9	0
,, at the period of reparation well established	12	9	3
,, at an advanced period of reparation	3	3	0
,, at an extra advanced period of reparation	7	2	5
,, of a gangrenous form	1	0	1
,, inoculated after a deep cauterization	1	0	1

2. *Inoculations of Indurated Chancres.*

	Number of inoculations.	Positive results.	Negative results.
Indurated chancres at the period of increase . .	13	1	12
,, at the stationary period . .	55	0	55
,, at the period of transition .	16	0	16
,, at the period of reparation .	9	0	9
,, of a gangrenous form . . .	6	0	6

If we throw a glance upon these two tables, we are struck by the different results furnished by inoculation, according to whether they were obtained from simple chancres or from ulcerations of an infecting nature. On the one hand, the answer is almost invariably *positive;* on the other, almost invariably *negative.* Let us, for example, compare the results obtained by the inoculation of chancres of a different nature, but *interrogated* at similar periods of their existence,—the stationary period, for instance.

Simple chancres: forty-four inoculations; forty-four positive inoculations,—that is to say, furnishing the specific pustule.

Infecting chancres: fifty-five inoculations; fifty-five negative inoculations,—sterile.

Here we have, on both sides, absolute results; and both absolutely opposed to one another. But let us continue the comparison. The infecting chancre, which does not furnish positive inoculations at its stationary period, cannot *à fortiori* be inoculated at its period of decline, when its specific virulence is decreasing. The simple chancre, on the contrary, retains its powers of inoculability, not only at the period of transition, but *even* at the period of reparation. Its edges may have commenced to cicatrize, but the centre of the ulcer still retains its virulent specificity. Out of seven chancres inoculated at a period when the work of reparation was extremely far advanced, two, as our table shows, furnished the characteristic pustule.

The preceding numerical results amply suffice to demonstrate this double proposition:—

1. *The simple chancre, at the stationary period, is infallibly inoculable on the individual affected with it.*

2. *The inoculation of the infecting chancre, at the same period, is, if not impossible, at all events, extremely difficult, and very rarely obtained.**

* This result entirely agrees with the experiments of Dr. Puche, ac-

This latter proposition, however, requires some restriction: it is only applicable to chancres at the stationary period, that is to say, to those chancres that have acquired their full development. It does not prejudge, in the least, the conditions of inoculability of the infecting chancre *prior to this period.* It is precisely this relation existing between the inoculability and the age of the infecting chancre, that has not been, up till now, sufficiently studied. This gap in our knowledge is especially manifest for the period of *début*, and probably it will be long ere it is filled up. In fact, we rarely find, at the hospital at all events, this variety of the primitive affection at a period very proximate to its origin. The indolence of the ulceration, no doubt, explains the tardiness of patients in obtaining medical advice. The majority of infected individuals do not present themselves for several weeks after the contagion; that is to say, at a period when

cording to whom, the inoculation of the infecting chancre does not furnish the specific pustule more than twice in a hundred. I must add that my friend and colleague, M. Poisson, who has continued in M. Ricord's wards these investigations on the comparative inoculation of the two chancres, has obtained results completely analagous to mine. This is shown by the following table, which he has kindly forwarded to me :—

1. *Inoculation of Simple Chancres.*

	Number of inoculations.	Positive results.	Negative results.
Chancres at the period of progress or at the stationary period	5	5	0
,, at the period of transition . . .	2	2	0
,, at the period of reparation . . .	6	6	0

2. *Inoculation of Indurated Chancres.*

Chancres at the period of progress	4	0	4
,, at the stationary period	20	1*	19
,, at the period of transition	11	0	11
,, at the period of reparation	17	0	17

* This chancre dated from nine days.

the chancre has generally acquired its full development. It is, therefore, only rarely that we are enabled to interrogate the pus of an extremely recent ulcer. For my part, the most recent I inoculated this year had existed from eleven to fifteen days, and I have never met with any of a more recent origin.

It seems to me, that this non-inoculability of the infecting chancre, when arrived at a certain period, might have been foreseen and announced *à priori*. In fact, it is at the same time conformable to a case of daily observation, and to the great laws of general pathology. On the one hand, see whether the indurated chancre multiplies itself *on the spot*, by a series of successive inoculations in the neighbourhood; see whether it frequently produces, in its proximity, the chancre with a soft base, simulating the aspect of the simple chancre, and to which a contemporary syphilograph has given the name of chancroid. It does nothing of the kind; the infecting chancre, as M. Ricord has said, remains solitary. In order that it may multiply itself, in order that it may reproduce itself, we must, so to say, ASSIST NATURE, by opening with a lancet an artificial entrance for the virulent pus. And even this process is insufficient in the great majority of cases; for the inoculation thus practised is usually sterile. On the other hand, let us interrogate the laws which rule the pathology of virulent affections. Does vaccine reproduce its specific pustule a fortnight after a first inoculation? Does the insertion of the varioloid pus remain without result in an individual recently affected with small-pox? It would, therefore, truly be an exceptional privilege if the infecting chancre could, at the moment in which it creates a diathesis, reproduce itself on the same individual, even in modifying its form and external characters. The preceding experiments have proved, that the infecting chancre, when under the conditions of age in which we observed it, that is to say, after the second week of its

existence, can only be inoculated with great difficulty, and very rarely upon the patient bearing it. Well, this result must not be a dead letter; we may take advantage of it, and use it in diagnosis to distinguish the two species of primitive ulcerations. Let us take, for example, a chancre of several weeks' date, at the stationary period. The swelling of the diseased parts, the inflammatory œdema, or any other cause, prevents the exact appreciation of the state of the base upon which the ulceration rests. Moreover, I suppose the inguinal adenopathy* ill defined and barely visible. Under such conditions, the two ordinary elements of diagnosis being simultaneously wanting, is it not true that the nature of the chancre cannot be determined; and that, restricted to his habitual resources, the judgment of the practitioner is necessarily suspended? Well, under such circumstances, cannot we invoke another sign; cannot we demand from the lancet the distinction refused to us by symptomatology? Inoculate the pus furnished by the ulceration. If the inoculation is negative, it is not certainly a simple chancre with which you have to do; for, at the period at which we have supposed the ulcer to be, this variety of the primitive affection infallibly inoculates. You have, therefore, before you an infecting chancre. If, on the contrary, you have obtained the specific pustule, the chances are in favour of a simple chancre; for we know that in the great majority of cases, if not always, ulcerations of an infecting nature give a negative answer to the lancet. Inoculation, no doubt, does not give under these conditions absolute certainty; besides, patients cannot always be submitted to it. However, we must not lose sight of the

* The indolent adenopathy connected with indurated chancre and malignant disease may be interrogated with advantage when coupled with a doubtful ulceration, as of the lip or tongue, for example, and decide the diagnosis, from the fact that, in the case of chancre, the adenopathy usually appears before the twelfth day, whereas in the instance of malignant disease it rarely appears before the twelfth month.—C. F. M.

services it may render, and refuse its aid. The indications which it furnishes are, in fact, interesting in a double point of view; firstly, doctrinally, as they reveal to us a very different aptitude of the two varieties of the primitive affection; secondly, it is an incontestable fact that inoculation offers in practice a new distinguishing sign which may find its application in certain difficult and intricate cases as a complementary element of diagnosis.

NOTE IX.

INFLUENCE OF ERYSIPELAS ON PHAGEDÆNISM.

OBSERVATION TAKEN BY M. ALFRED BUZENET, EXTERNE OF THEMIDI.—*Midi*, 1856.

J—— (Jean Baptiste), aged 46, contracted, in 1836, a first gonorrhœa, which lasted several months. Two years later he again contracted gonorrhœa, which was only cured after six months' treatment. During the course of this latter affection he was affected with adenitis, brought on by violent exercise, and which terminated by suppuration; but as soon as the pus was discharged, the cicatrization was rapid. From that time up to 1848, no affections. During the month of August of this year, J—— contracted a chancre. This chancre, which was situated on the right side of the external surface of the prepuce, soon cicatrized, by means of cauterization with the nitrate of silver, and dressing with aromatic wine; but this case was followed, after an interval which the patient cannot determine, by a sore throat of a rebellious nature; later, the septum of the nose was partly destroyed, and this was followed by an affection of the skin, which left numerous cicatrices on the trunk and upper extremities. (The form and aspect of these cicatrices lead M. Ricord to think that these manifestations are not of a syphilitic nature.) Towards the end of the year 1849, J—— contracts a fresh chancre, and places himself under the care of a provincial practitioner. This chancre, situated on the

right side of the internal surface of the prepuce, was accompanied by a bubo on the left side (crossed bubo). The cicatrization of the chancre was speedy. As to the bubo, it opened and suppurated, during about eight months, without any tendency to spread; it then furnished but a small quantity of pus; its edges, however, remained tumefied and painful. About eight months after the "début" of the bubo, the inguinal ulceration commenced to spread; it first invaded the inferior part of the abdomen, and then the posterior and lateral region of the left buttock. The cicatrix which it has left may now be very well limited by two lines, the one extending from the symphisis pubis to the umbilicus, the other extending from the umbilicus, over the anterior superior spine of the ilium to the upper part of the sacrum. It must be remarked, that the ulceration has not gone beyond the mesial line, either in front or behind. At the commencement of the phagedænic march of the ulcer a new chancre, the result of an accidental inoculation, had appeared on the internal surface of the left thigh, towards its upper part; this chancre soon commenced to enlarge, and, assuming the same character as the inguinal ulceration, it rapidly invaded the posterior surface of the thigh. Such was the state of the patient when he presented himself to M. Ricord (1852). Treatment at this period:—the tartrate of iron administered internally; dressings of the sore with solutions of iron; cauterization of the edges of the ulceration with a red-hot iron. Under the influence of this treatment, the ulcerations on the buttock and abdominal parietes cicatrized; that on the thigh was restricted to a limited point of the middle part of the member.

The patient, thinking himself cured, quitted M. Ricord towards the end of the month of March, 1853, but he soon returned in the month of June of the same year. The sore on the thigh was, at this period, greatly enlarged; its edges were tumefied, painful, abrupt, and undermined. The patient,

at each dressing, became aware of the progress of the disease. (Application of the extract of watercresses; administration, internally, of the tartrate of iron; dressings with solution of iron; cauterization of the edges of the sore with a red-hot iron). This treatment did not arrest the progress of the ulceration, which continued to descend along the thigh, until it reached the knee, assuming a serpiginous form. In 1856, this enormous ulceration, still continuing its progress, had passed the knee. On the 1st of August, it extends, outwards, from the upper part of the condyle of the femur to the anterior tuberosity of the tibia; inwards, from the upper part of the condyle of the femur to the upper and internal part of the calf of the leg; a cutaneous bridge, the width of a finger, is thrown across the middle of the sore, without adhering to it; the edges of the ulceration are abrupt, everted, and painful; the floor is pale; the knee, half bent, is retained in this position by the retraction of the hamstrings, to which muscles the cicatrix strongly adheres. The articulation does not seem to be affected, as it can execute limited movements. The general health is good; only the patient complains of frequent want of rest, and of constipation, produced, no doubt, by the habitual use of opium. During the night of the 2nd of August, violent cephalalgia. On the 3rd, pains in the extremities, fever, prostration. On the 4th, the inferior part of the sore is tumefied, red, hot, and painful. M. Ricord recognises an erysipelas at its "*début.*" This inflammation rapidly invades the inferior part of the leg, and extends as far as the malleoli. The only exciting cause which we can imagine for the appearance of this erysipelas is the application of the carbo-sulphuric paste, made on the 29th of July, upon a limited point of the sore. (Mercurial frictions on the surface occupied by the erysipelas; the extremity is wrapped up in lint, soaked in a decoction of elder; the sore is dressed with a solution of iodine; a bottle of Sedlitz water.) On the 5th of August, the erysipelas has

reached the extremity of the foot, the sore has lost its habitual aspect, its floor is raised, the swelling of the edges has diminished, the inflammation is much less intense. We establish the "*début*" of a work of cicatrization on the whole circumference of the ulceration. (Same treatment.) 6th August. The sore has completely lost its primitive character; its surface is rose-coloured; its sunken edges seem better united to the subjacent tissues. The work of cicatrization progresses from the circumference towards the centre with an extreme rapidity: the cutaneous bridge is giving way; its extremities become detached, and it falls on the 8th. The 9th. Appetite completely restored; the erysipelas has disappeared on the knee; a slight puffiness only remains, which is restricted to the external malleolus and to the dorsal surface of the foot; the remaining parts of the leg have lost all redness and sensibility to pressure. From this day forward the sore progresses in a regular manner towards cicatrization, as if it were a simple sore. On the 14th, it has considerably diminished in extent; its appearance is such as not to remind one in any way of the characters of a chancre; its rose-coloured floor, its levelled edges, covered by a zone of cicatrization, clearly prove that the ulceration has entirely lost its specific character. M. Ricord, however, announces that it will be long ere the cicatrization is complete, on account of the special conditions of the ulceration; in fact, the enormous zone of cicatrization which surrounds the sore firmly adheres to the subjacent tissues, and can no longer assist the approximation of the opposite edges of the ulceration. This unfortunate prognosis was soon verified; the work of cicatrization, after having advanced with astonishing rapidity, relaxed and, finally, stopped; the sore, it is true, did not re-assume its chancrous character, nor did it extend itself, but it continued to remain in the same state. Even to-day (12th May, 1857) it still persists, retaining the same aspect, and extending over a considerable surface. However, it is an incontestable fact,

that the progress of the ulceration was arrested the moment the erysipelas came to neutralize, as it were, the phagedænic virus; from that moment commenced the work of reparation which had been waited for in vain during eight years. Finally, these two phenomena, the manifestation of the cutaneous inflammation, and the transformation of the ulcer, are united to each other by a relation differing from that of a simple fact of coincidence.

NOTE X.

OBSERVATIONS ON THE CONTAGION OF CHANCRE.

I reproduce in this note the documents that I collected during the course of this year, on the contagion of chancre, and which were mentioned by M. Ricord in his lectures. The following observations all relate to *one* question, the contagion of chancre in each of its varieties. In each group, therefore, they are mostly similar amongst themselves. I am far from dissimulating the monotony such a long enumeration must cause the reader. For this I have a double excuse; firstly, the great importance of the doctrinal questions which are attached to the recent investigations on contagion; secondly, the place occupied by these observations amongst the Notes and Cases. I shall, however, take care to leave out any observations that may be extraneous to the subject in question, retaining only such parts as are indispensable to establish at the same time the undoubted filiation of the affection of contagion and the relation of the symptoms between the infecting and infected individual.

FIRST GROUP.

TRANSMISSION OF THE SIMPLE CHANCRE IN ITS FORM, *FROM* A VIRGIN SUBJECT *TO* A VIRGIN SUBJECT.

Obs. 1. Triple Contagion of Simple Chancres.

Three patients at the Midi contracted chancres from the same woman. The following are the symptoms which were

established on each of them, as well as upon the woman who had infected them :—

D——, aged 18; lymphatic; no venereal antecedents. Connexion, during the latter days of August, with the girl Hortense. (Previous coitus dating from six weeks; no consecutive coitus.) Chancres developed after the lapse of a few days; no treatment. Actual state, 27th September: five typical simple chancres on the corona and prepuce; left inguinal adenitis. Dressings with aromatic wine, poultices. Positive inoculation with the pus of one of the chancres on the prepuce, resolution of the adenitis, cicatrization of the chancres in four weeks. Seen on several occasions up to April, 1857; no syphilitic affection.

S——, aged 24, robust and sanguine. Antecedents: chancres in 1853. No mercurial treatment. No consecutive affections. Gonorrhœa in 1854. Connexion with the girl Hortense during the month of September. (Previous coitus dating from seven weeks; no consecutive coitus). Chancres recognised eight or ten days after the last coitus; cauterization. Actual state, September 18th: three simple chancres on the prepuce, with an inflammatory œdematous base, no glandular reaction, simple treatment. Positive inoculation with the pus of one of the chancres. Left the hospital on the 19th of October, the chancres being cicatrized. Followed up to April, 1857; no syphilitic affection.

B——, aged 20; lymphatic; no venereal antecedent. Connexion with the girl Hortense during the latter days of September. (Anterior coitus dating from about seven months; no consecutive coitus.) Chancres recognised towards the end of September. Dressing with plaster. Actual state, October 5th: four simple chancres on the prepuce and on the corona, no glandular reaction. Positive inoculation with the pus of one of the chancres. Dressings with aromatic wine; cure in three weeks. Followed up to January, 1857; no syphilitic affection.

R——(Hortense), aged 24; robust constitution; first venereal affection. Actual state, 7th October (St. Lazare): three typical simple chancres, occupying together nearly the whole entrance to the vagina; no other symptom. Cauterization; chlorine lotions. Left St. Lazare on the 25th October. Seen on two occasions at St. Lazare, up to April, for fresh simple chancres; no syphilitic affection.

Obs. 2. Double Contagion of Simple Chancres. (See page 47.)

Obs. 3. Double Contagion of Simple Chancres. (See page 48.)

Obs. 4. Triple Contagion of Simple Chancres. (See page 49.)

Obs. 5. Double Contagion of Simple Chancres.

B——, aged 28; robust constitution, sanguine temperament; no venereal antecedent. Connexion with the girl Léontine during the latter days of August. (Previous coitus dating from two months; no consecutive coitus.) Chancres recognised in the first days of September. Dressing with mercurial ointment. Actual state, September 16th: three simple chancres with a soft base, seated on the prepuce; no glandular reaction. Positive inoculation with the pus of one of the chancres. Dressing with aromatic wine; rapid cure. Followed up to December; no syphilitic affection.

P——, aged 29, robust and plethoric. Antecedents: gonorrhœa in 1855. Connexion with the girl Leontine during the first days of September. (Previous coitus dating four weeks.) Chancres recognised on the day following the last coitus; cauterization. Actual state, September 20th: multiple simple chancres with a soft base, seated on the corona and on the mucous surface of the prepuce; no glandular reaction. Positive inoculation with the pus of one of the chancres. Cauterization; rapid cure. Followed up to December; no syphilitic affection.

Leontine, aged 19, prostitute, sanguine temperament,

strong constitution; first venereal affection. Actual state, 9th September (St. Lazare): soft chancre, very small, on the internal surface of the left nympha. No other symptom. Chlorine lotions; rapid cure. Left the hospital, September 15th. Seen in January and in February, 1857; no syphilitic affection.

Obs. 6. Double Contagion of Simple Chancres.

V——, aged 28, sanguine temperament, robust constitution. Antecedents: simple chancres in 1849. No consecutive affection. Connexion with the girl L—— during the first days of August. (Previous coitus dating from several weeks.) Chancres recognised a few days after the last coitus, towards the 10th. Treatment: some decoctions. Actual state, 19th August: simple chancre on the frænum; the base of the ulceration is perfectly supple; acute adenitis in the left groin. Positive inoculation with the pus of the chancre. Suppuration of the adenitis, which assumes a strumous character. Seen in December; no syphilitic affection. It was the pus from this chancre which was employed for the second inoculation practised on the young physician, of whom I spoke at page 45. I must add, that I saw, a few days ago (July, 1857), our brave colleague; no syphilitic affection had manifested itself on him, he had not followed any treatment.

P——, aged 20, lymphatic. No venereal antecedent. Connexion with the girl L—— on the 7th of August. (Previous coitus dating more than two months.) Chancres developed towards the 15th of August. Dressing with aromatic wine. Actual state, 9th September: three simple chancres, two on the prepuce, the third on the corona; acute adenitis in the left groin, suppurating and open, acute adenitis in the right groin. Positive inoculation with the pus of one of the chancres on the prepuce. Left the hospital in October. Seen on several occasions up to January, 1857; no syphilitic affection.

L——(Barbara), aged 17, prostitute; scrofulous; first venereal affection. Actual state, August 18th (St. Lazare): soft chancre on the right labium, dating from several days; acute adenitis in the right groin. Leeches, poultices, simple dressing; rapid cure. Seen in March, 1857, at St. Lazare, for a fresh simple chancre; no syphilitic affection.

Obs. 7. Double Contagion of Simple Chancres.

M——, aged 42, very robust. Antecedents: two gonorrhœas, the last in 1848; no consecutive affection. This man had been living for about a year with the girl Solange, without having any connexion with other women, when he was affected with chancres. No treatment. Actual state, 12th October, 1856: multiple simple chancres on the corona and on the prepuce. Simple treatment; cure in five weeks. Seen up to April, 1857; no syphilitic affection.

C——, aged 19; lymphatic, feeble; no venereal antecedent. Connexion with the girl Solange towards the 5th October. (Previous coitus dating from several months.) Chancres recognised on the third day after the last coitus. Dressing with mercurial ointment. Actual state, 21st October: multiple simple chancres (from eight to ten) on the prepuce and glans, no glandular reaction; positive inoculation with the pus of one of the chancres. Dressing with aromatic wine; cure in six weeks. Seen up to February, 1857; no syphilitic affection.

V—— (Solange), aged 18; lymphatic. Antecedents: simple chancres in 1855; no consecutive affection. Actual state,. October: simple chancre, very extended, occupying the fourchette and the entrance of the vagina. (Type of a simple chancre.) Cauterization; cure in few weeks. No consecutive affection.

Obs. 8. N——, aged 26; lymphatic. Gonorrhœa in 1852. Actual chancres dating since the first days of February, 1856. This young man, for the last seven or eight months, has had no connexion but with the girl R——.

Actual state, 21st February: simple chancres on the corona. Positive inoculation with the pus of one of the chancres. Simple dressing; rapid cure. Followed up to January, 1857; no syphilitic affection. M. Ricord visited the woman from whom this patient had contracted the contagion. She confessed that she had, on several occasions, been unfaithful to her lover; but she maintained that she was healthy, and that she had never been affected with any venereal disease. We discovered upon her a large chancre on the neck of the uterus, deeply excavated, with a *soft* floor, and of a phagedænic form, having the appearance of the soft variety of the primitive affection. Cauterization, simple dressings; cure in a few months. Although observed up to January, 1857, this patient did not present any syphilitic affection.

Obs. 9. C——, aged 24; sanguine temperament, robust constitution. Antecedents: gonorrhœa in 1855. Cured in two months. This young man lived with the girl Antoinette P——, without having had connexion with other women for several months, when, towards the end of November, he was affected with several chancres. No treatment. Actual state, November 30th: multiple soft chancres on the prepuce, soft chancre on the frænum, acute adenitis in the right groin. Positive inoculation with the pus of the chancre on the frænum. 17th December, opening of the bubo. In the following days the sore assumes a chancrous appearance. Seen in March, 1857; no syphilitic affection.

Antoine P——, aged 18; lymphatic. Antecedents: granular metritis during the latter months of the year 1825. In June, 1856, this girl was retained at St. Lazare for a uterine catarrh. No previous syphilitic affection. Actual state (November): multiple soft chancres on the vulva, acute suppurating adenitis of the right groin. Rapid cure; no consecutive affection. In February, 1857, this girl re-entered St. Lazare for an indurated chancre.

Obs. 10. S——, aged 22; middling constitution, lymphatic

temperament. Antecedents : two gonorrhœas, the last in 1854, with orchitis. Connexion with the girl Rosa M—— during the latter days of July. (Previous coitus dating from four weeks; no consecutive coitus.) Chancres developed in the beginning of August. Emollient lotions. Actual state, 17th August : multiple simple chancres on the prepuce and glans, double acute adenitis. Positive inoculation with the pus of one of the chancres. Treatment : aromatic wine and poultices. Suppuration of the two bubos. Cicatrization of the chancres at the beginning of September. Followed up to December, 1856; no syphilitic affection.

M—— (Rosa), aged 20; robust constitution. Antecedents : chancre in 1853. No consecutive affection. Actual state, 17th August : three soft chancres on the right greater labium, dating from about a fortnight. No glandular reaction; rapid cure. Seen in December; no syphilitic affection.

Obs. 11. M——, aged 22; middling constitution, lymphatic; no venereal antecedents. This young man lived with the girl Flavia, without ever having had connexion with other women. Manifestation of several chancres on the penis during the first days of May. No treatment. Actual state, May 13th : multiple simple chancres on the prepuce and glans, acute adenitis in the left groin; positive inoculation with the pus of one of the chancres. Treatment : leeches, poultices; dressing with aromatic wine. Suppuration of the adenitis, which is opened on the 23rd. Left the hospital on the 4th of July, without having experienced any fresh affection. Seen in September; no constitutional affection.

Flavia B——, aged 24; robust constitution, sanguine temperament; no venereal antecedent. Actual state, 9th May (St. Lazare) : simple chancre on the vulva, with a soft base; chancre on the neck of the uterus. No glandular reaction. Cauterization, simple dressing. Left on the 30th June. Not seen again.

Obs. 12. M——, aged 28; scrofulous subject; no ve-

nereal antecedent. This young man had been living for the last three months with the girl Sophia, without having connexion with other women, when he contracted chancres during the first days of November. Actual state, November 16th: chancre on the corona, no glandular reaction. Dressing with aromatic wine; cure in a few days. Seen on several occasions up to April, 1857; no syphilitic affection.

C—— (Sophia), aged 22; lymphatic; first venereal affection. Actual state, November 17th: multiple, typical, soft chancres, seated on the greater and lesser labia; no glandular reaction. Dressing with aromatic wine; rapid cure. Followed up to March, 1857; no syphilitic affection.

Obs. 13. A——, aged 32; robust constitution, sanguine temperament, no venereal antecedent. This man had been living with the girl, Sophia W——, without having connexion with other women during seven months, when he contracted chancres during the month of May, 1856. Actual state, May 30th: four chancres, with a soft base, on the prepuce and corona, no glandular reaction. Treatment: cauterization, dressings with aromatic wine. Complete cicatrization of the chancres on the 14th of July. Seen in December, 1856, for a gonorrhœa; no syphilitic affection.

Sophia W——, aged 25; lymphatic constitution, nervous temperament. Antecedents: vaginitis and ulcerated metritis in 1855. Actual state, June 23rd (St. Lazare): double chancre, with a soft base, on the carunculæ; right inguinal adenitis, suppurating. Left St. Lazare in August. Seen in December, 1856; no syphilitic affection.

Obs. 14. D——, aged 26, good constitution, sanguine temperament, no venereal antecedent, vegetations dating five or six weeks. Connexion, on the 1st of October, with the girl, Josephine L—— (previous coitus dating from six weeks). Chancres recognised three or four days after the last coitus. No treatment. Actual state, October 10th: two simple chancres on the corona, no other affection. Positive inoculation with

the pus of one of the chancres; cauterization; very rapid cure. Seen in December for a recent gonorrhœa. Followed up to February, 1857; no syphilitic affection.

L—— (Josephine), aged 20; strong constitution. Antecedents:—This girl has been twice retained at St. Lazare, during the course of the year, for simple chancres. No general affection. Actual state, October 10th: typical soft chancre of the right lesser labium. No other affection. Cauterization. Left on the 25th. Seen in 1857; no syphilitic affection.

Obs. 15. T—— (John), aged 52; bilious temperament; constitution formerly strong, but weakened by work and by an irregular life. No venereal antecedent. Connexions with the girl Clemence during the first fortnight of the month of April, 1856 (previous coitus dating two months). Manifestation of several chancres a few days after the last coitus. No treatment. Production of an œdematous phymosis, accompanied by intense inflammation. Actual state, April 18th: œdematous phymosis; prepuce very much swollen, presenting an erysipelatous hue; a few gangrenous spots; bloody discharge, mixed with organic matter, of a gangrenous odour. In the following days, very extensive separation of the mortified parts; perforation of the prepuce at several points; slight glandular tension in the groins; chancre, with a soft base, accidentally inoculated on the left thigh. 30th. The glans can be uncovered; the existence of several chancres on the corona, and on the mucous surface of the prepuce, is then recognised; these chancres do not present any induration at their bases. Simple treatment; rapid cure. Followed up to October, 1856; no syphilitic affection.

Clemence H——, aged 35, prostitute; consumptive. No venereal antecedent. Actual state, April 29th (St. Lazare): gangrenous chancre, with a slightly swollen base, but devoid of specific induration, seated at the entrance of the vagina; no glandular reaction. Simple treatment. No syphilitic affection. Died six months after entering St. Lazare.

Obs. 16. V——, aged 21; middling constitution; no venereal antecedent. Connexion with the girl D—— (Emily), from the 15th to the 18th of September (previous coitus dating from the 15th of August; no consecutive coitus); chancres developed on the 20th of September. Actual state, 21st: three typical simple chancres; no glandular reaction. Deep cauterization; very rapid cure. Seen up to April, 1857; no syphilitic affection.

D—— (Emily); feeble and lymphatic; no venereal antecedent. Actual state, September 25th: multiple simple chancres, with a completely soft base, situated on the greater and on the lesser labia. These chancres, according to the patient, are from ten to fifteen days' date. Cauterization; cure in five weeks. Seen up to April, 1857; no syphilitic affection.

Obs. 17. R——, aged 18; lymphatic; no venereal antecedent. Connexion with the girl, Adèle B——, on the 2nd of November (previous coitus dating three or four weeks). Chancres recognised on the 4th of November. Actual state, November 10th: œdematous phymosis; three simple chancres on the inferior part of the prepuce; acute adenitis in the right groin; positive inoculation with the pus of one of the chancres. Dressings with aromatic wine; poultices. Resolution of the adenitis; cicatrization of the chancres towards the 10th of December. Seen in May, 1857; no syphilitic affection.

B—— (Adèle), aged 20; prostitute; strong constitution. Antecedents:—retained at St. Lazare, in 1854, for a vaginitis; in 1856, on two occasions, for vegetations and simple chancres. No syphilitic affection. Actual state, November 7th (St. Lazare): three simple chancres, one on the meatus, the other two on the lesser labia; purulent uterine catarrh. Cauterization; plug of wadding soaked in a solution of alum; rapid cure. Seen in January, 1857, for fresh simple chancres; no syphilitic affection.

Obs. 18. D——, aged 22; feeble constitution; scro-

fulous subject; no venereal antecedent. This young man had not seen any women for nine months, when he had connexion with the girl Juliette during the first week of October. Manifestation of several chancres, a few days after the last coitus. No treatment. Actual state, November 10th: multiple simple chancres on the prepuce; double acute adenitis, suppurating; the two bubos are open. Poultices; dressings with aromatic wine. Positive inoculation with the pus of one of the chancres. Seen in December; followed up to May, 1857; no syphilitic affection.

Juliette, aged 20, prostitute: very strong constitution; first venereal affection. Actual state, October 17th (St. Lazare): large simple chancre, seated on the fourchette and entrance of the vagina; suppurating bubo in the right groin. Simple dressing, poultices. The inguinal ulceration becomes phagedænic. Ferruginous preparations; cauterization with a red-hot iron. Seen in 1857; no syphilitic affection.

Obs. 19. R——, aged 27; robust constitution. Antecedents: four gonorrhœas, the last in 1853. Connexion with the girl T—— (Maria) during the first days of July (previous coitus dating five weeks; no consecutive coitus); chancres developed towards the 10th of July. Actual state, July 21st: multiple simple chancres on the prepuce; no glandular reaction. Dressings with aromatic wine; cure in three weeks. Seen on several occasions up to March, 1857; no syphilitic affection.

T——— (Maria), aged 26; prostitute; no venereal antecedent. Actual state, July 24th (St. Lazare): typical soft chancre, seated on the internal surface of the left labium; no glandular reaction. Cauterization; rapid cure. Seen in October, at St. Lazare, for a fresh chancre on the fourchette; no syphilitic affection. Followed up to February; no manifestation of a diathesis. In January, fresh chancre, with a soft base.

Obs. 20. M—— (Edward), aged 20; sanguine temperament; robust constitution; no venereal antecedent. Connexion with the girl Virginie on the 15th of July (previous coitus dating five weeks; no consecutive coitus). Manifestation of several chancres towards the 22nd. No treatment. During the first days of August, painful swelling in the groins. Actual state, August 8th: two simple chancres, with a soft base, on the corona, one on the right side, the other on the left; double acute inguinal adenitis. Treatment: aromatic wine, leeches, poultices. Resolution of one of the bubos; the other is opened on the 17th of August, and the sore assumes a chancrous appearance. Positive inoculation with the pus of one of the chancres on the corona. Left the hospital on the 27th of October. Seen in March, 1857; no constitutional affection.

Virginie D——, prostitute, aged 19; nervous temperament. Antecedents in June, 1856: soft chancre on the fourchette; rapid cure, without internal treatment. Actual state (August): three soft chancres, one on the left labium, another on the fourchette, and the third on the internal surface of the right nympha. No glandular reaction. Rapid cure. Seen at St. Lazare in November, 1856, for fresh simple chancres. No syphilitic affection had manifested itself up to that day. Seen again in January, 1857, for a metritis; and in the following months for fresh simple chancres. No constitutional affection.

Obs. 21. (*V.* page 45).

II.

I place in this second chapter those observations in which we have only compared the affections on several individuals infected by the same woman, without being able to ascertain the source of this infection.

Obs. 22. Quadruple contagion of simple chancres. (See page 50.)

Obs. 23. Quadruple contagion of simple chancres.

Four patients at the Midi, infected by the same woman, presented the following affections :—

I.—D——, aged 20; robust; no venereal antecedent. Connexion with the girl Z—— during the latter days of June. (Previous coitus dating thirty-two days; no consecutive coitus.) Chancres developed on the 1st of July. No treatment. Actual state, 12th July :—multiple simple chancres on the inferior part of the prepuce; no glandular reaction. Simple dressing; positive inoculation with the pus of one of the chancres. Cure in twelve weeks. Seen up to January, 1857; no syphilitic affection.

II.—B——, aged 24; lymphatic; no venereal antecedent. Connexion with the girl Z——, June 20. (Previous coitus dating two months; no consecutive coitus.) Chancres developed on the 25th. No treatment. Actual state, 3rd July: multiple, simple chancres on the prepuce. Simple dressing; cure without casualty. (Communicated by M. Puche.)

III.—L——, aged 21; lymphatic; no venereal antecedent. Connexions with the girl Z—— during the first days of July. (Previous coitus dating three months; no consecutive coitus.) Chancres developed towards the 8th of July. Dressed with white lotion. Actual state, 27th July: simple chancres on the corona. Simple dressing. Positive inoculation with the pus of one of the chancres. Acute adenitis developed in August, suppurated; glandular chancre. Followed up to December; no syphilitic affection.

IV.—K——, aged 30; robust and sanguine. Antecedents: Gonorrhœa in 1846. Connexion in July, with the girl Z——. (Previous coitus dating eight months; no consecutive coitus.) Chancres developed almost immediately. Mercurial ointment. Actual state, 25th July: simple chancres on the prepuce. Simple dressing. Positive inoculation with the pus of

one of the chancres. In August, acute adenitis, suppurated. Followed up to February, 1857 ; no syphilitic affection.

Obs. 24. Triple contagion of simple chancres.

Three patients at the Midi were infected by the same woman ; they each presented the following affections :—

I. B——, aged 20 ; lymphatic. Antecedents :—Simple gonorrhœa in 1854. Connexion with the girl C—— towards the 15th of June. (Previous coitus dating two months.) Actual chancres recognised on the 19th. Actual state, 1st July : six simple chancres on the prepuce, frænum, and corona ; acute adenitis in the left groin, suppurated. Simple treatment. Positive inoculation with the pus of one of the chancres. Seen up to December, 1857 ; no syphilitic affection.

II.—P——, aged 21 ; robust. Antecedents :—Two gonorrhœas in 1854 and 1855. Connexion with the girl C—— from the 18th to the 25th of June. (Previous coitus dating six weeks ; no consecutive coitus.) Actual chancres recognised in the first days of July. No treatment. Actual state, July 21 : three simple chancres ; two on the integuments of the penis, of an ecthymatous form ; the third on the glans. Simple treatment. Positive inoculation with the pus of one of the chancres. No syphilitic affection up to the time the patient leaves the hospital (September 30). Lost sight of.

III.—C——, aged 19 ; lymphatic, feeble ; no venereal antecedent. Connexion with the girl C—— during the latter days of June. (Previous coitus dating twenty-six days ; no consecutive coitus.) Actual chancres dating from the first days of July. Actual state, July 17th : simple chancres on the prepuce and integuments of the penis. Simple treatment. Positive inoculation with the pus of one of the chancres. Cure in eight weeks. Followed up to February, 1857 ; no syphilitic affection.

Obs. 25. Two patients, infected by the same woman, presented the following affections :—

B——, aged 25; robust; no venereal antecedents. Connexion with the girl M—— during the first days of April. (Previous coitus dating seven weeks; no consecutive coitus.) Chancres developed on the 8th of April. No treatment. Actual state, August 17th: simple chancres on the corona; no glandular reaction. Dressing with carded cotton. Cure in six weeks. (Communicated by M. Puche.)

A——, aged 23; middling constitution. Antecedents: two gonorrhœas, the last in 1855. This young man had been living for several months with the girl M——, without having connexion with other women, when he became affected with chancres during the latter days of March. White lotion. Actual state, April 8th: multiple simple chancres on the prepuce and on the corona; no glandular reaction. Dressing with aromatic wine. Rapid cure. Seen in August; gonorrhœa. Followed up to September; no syphilitic affection.

Obs. 26. P——, aged 23; robust, bilious; no venereal antecedent. Connexion, during the latter days of May, 1856, with the girl P——. (Previous coitus dating at least two months; no consecutive coitus.) Chancres recognised during the first days of June. No internal treatment; dressings with white lotion. Actual state, 3rd July: multiple chancres on the prepuce and on the corona, some of which are deep, excavated, and have a phagedænic tendency. Dressing with a solution of potassio-tartrate of iron. Positive inoculation with the pus of one of the chancres on the prepuce. Followed up to March, 1857; no syphilitic affection.

G——, aged 29; robust and sanguine; no venereal antecedent. Connexion, during the last week (1856), with the girl P——. (Previous coitus dating seven weeks; no consecutive coitus.) Chancres developed on the 1st of June. Dressings with CAMPHORATED ointment. Actual state, June 20th: simple chancres on the prepuce, acute adenitis in the right groin. Dressing with aromatic wine, poultices.

Positive inoculation with the pus of the chancre on the prepuce. Suppuration of the adenitis, which is open on the 27th of June. Followed up to December, 1857; no syphilitic affection.

Obs. 27. M—— and R—— were infected by the same woman. They presented the following affections:—

M——, aged 20; lymphatic; no venereal antecedent. Connexion with the girl B—— towards the 20th October. (Previous coitus dating three months; no consecutive coitus.) Chancres developed on the 24th. Simple emollient lotions. Actual state, end of October: intense balanitis, simple chancres seated on the inferior part of the prepuce, painful tension of the glands in both groins. Injections with the nitrate of silver, baths, poultices. Positive inoculation with the pus of one of the chancres. Resolution of the adenitis. In November, the glans can be uncovered, and we recognise the existence of several chancres, with a soft base, seated on the mucous surface of the prepuce and on the glans. Aromatic wine. Followed only up to the 31st of December; no constitutional affection.

R——, aged 29; robust. Antecedents: chancres on the prepuce in 1850; no consecutive affection. Connexion with the girl B—— on the 22nd of October. (Previous coitus dating three months; no consecutive coitus.) Chancres developed after the lapse of a few days. Dressing with aromatic wine. Actual state, November 2nd:—two soft chancres on the internal surface of the prepuce. No glandular reaction. Dressing with aromatic wine. Cure in seven weeks. Followed up to April, 1857; no consecutive affection.

Obs. 28. Two friends had connexion, the same evening, with the same woman. They both contracted simple chancres.

P——, aged 18; lymphatic; no venereal antecedent. Connexion with the girl P—— on the 23rd of June. (Previous coitus dating four weeks; no consecutive coitus.)

Chancres developed on the following day. Actual state, July: simple chancres, multiple, seated on the inferior part of the prepuce. No glandular reaction. Dressing with aromatic wine; cicatrization in nine weeks Followed up to October; no consecutive affection.

B——, aged 22; very robust, sanguine. Antecedents: two gonorrhœas, the last eight months ago. Connexion with the girl P—— on the 23rd of June. (Previous coitus dating twenty-two days; no consecutive coitus.) Chancres recognised towards the 3rd of July. Actual state, July 17th: three simple chancres, two on the prepuce, the third on the integuments; acute adenitis in the left groin. Dressing with aromatic wine, poultices. Suppuration of the adenitis. Followed up to November; no consecutive affection.

Obs. 29. Two friends had connexion on the same day with the same woman; they both contracted simple chancres.

L——, aged 21; very robust, sanguine; no venereal antecedent. Connexion with the girl, Louisa V——, on the 8th of July. (Previous coitus dating seven weeks; no consecutive coitus.) Chancres developed on the 12th. No internal treatment. White lotion. Actual state, 7th August: simple chancres on the corona and on the frænum; acute adenitis. Positive inoculation with the pus of one of the chancres. Dressing with aromatic wine, poultices. Resolution of the adenitis; cicatrization of the chancre in five weeks. Seen on several occasions up to December, 1856; no consecutive affection.

M——, aged 19; feeble, lymphatic. Antecedents: gonorrhœa in 1855. Connexion with the girl, Louisa V——, on the 8th of July. (Previous coitus dating four weeks; no consecutive coitus.) Chancres developed towards the 15th; no treatment. Actual state, July 27th: multiple simple chancres on the corona, on the glans, and on the frænum; acute adenitis. Positive inoculation with the pus of one of

the chancres. Dressing with aromatic wine, poultices. Suppuration of the adenitis; cicatrization of the chancres in seven weeks. Seen in October; gonorrhœa. Followed up to February, 1857; no syphilitic affection.

Obs. 30. V——, aged 27; very robust; no venereal antecedents. Connexion with the girl L——, June 30th. (Previous coitus dating three months; no consecutive coitus.) Chancres developed during the first days of July; no treatment. Actual state, 15th of July: seven simple chancres with a soft base, seated on the prepuce and corona; acute adenitis, mono-glandular, in the left groin. Dressing with aromatic wine, poultices. Positive inoculation with the pus of one of the chancres. Suppuration of the adenitis, which is open on the 21st. The sore soon assumes a chancrous character, and invades a great part of the inguinal region. Dressing with a solution of iron; cure in September. Followed up to December, 1856; no consecutive affection.

G——, aged 27; middling constitution, bilious temperament; no venereal antecedents. Connexion with the girl L—— during the first days of July. (Previous coitus dating two years, according to the patient; no consecutive coitus.) Chancres developed after the lapse of a few days; repeated cauterizations. Actual state, 21st July: three simple chancres on the prepuce; the base of the ulcerations presents a slight inflammatory hardness, owing probably to previous cauterizations; painful tension of the glands in the right groin. Treatment: aromatic wine, poultices. Positive inoculation with the pus of one of the chancres. Resolution of the adenitis; cicatrization of the chancres in five weeks. Followed up to December, 1856; no consecutive affection.

III.

Obs. 31. Two friends had intercourse, the same night (17th August), with the same woman. One of them, aged 28, had just

been treated, in the wards of M. Rieord, for constitutional syphilis (aphthæ in the mouth, papulo-squamous syphilidis), when he had connexion, a few days after leaving the hospital, his penis was perfectly sound. He had not seen a woman for four months. The second, aged 18, had never had connexion with women. They both contracted chancres, and I recognised—1. On the first, five simple chancres with a soft base, on the prepuce and glans; acute bubo in the groin; suppuration; glandular chancre. Relapse of the constitutional affections; impetiginous syphilidis; ulcerations in the mouth. 2. On the second, simple chancres on the frænum and prepuce. Simple treatment; cure in six weeks. Followed up to March, without manifesting any syphilitic affection.

Obs. 32.

SECOND GROUP.

TRANSMISSION OF THE SIMPLE CHANCRE IN ITS FORM, FROM A VIRGIN SUBJECT TO A SYPHILITIC SUBJECT.

Obs. 33. (See page 84).

Obs. 34. A——— (Emile), aged 18. Had had chancre three weeks, when he had intercourse, on the night of September 30th, with the girl B—— (Eveline). On the same night, after an interval of half-an-hour, this girl accorded her favours to S—— (Alexis). Observe what I found upon these three patients :—

I.—A—— (Emile) presented himself on the 5th of October, with a large *chancre on the cutaneous surface of the penis, with soft base*, without glandular affection. (*First venereal accident*). Simple dressings. Cured after a few weeks. No secondary affections up to April, 1857.

II.—B—— (Alexis), aged 21; no previous venereal affection. Chancre of frænum observed early in September. Actual state, October 17: *simple chancre* on the frænum; *simple chancre* on the corona; no glandular affection. Positive inoculation with the pus from the chancre of the frænum.

Dressing with vin aromatique; rapid cure. Up to May, 1857, no secondary affections.

III.—B—— (Eveline), aged 18. Antecedents: roseola in August, 1856; mucous tubercles of vulva, alopecia, cervical adenopathy. Actual state, October 10th: *simple chancre* on external surface of labium, *simple chancre* on the anus. According to the patient, these ulcerations have existed a week. Bi-inguinal adenopathy, hard and indolent, dating several months. October 18th. Other mucous tubercles appear upon the vulva. Mercurial treatment. No new affection.

THIRD GROUP.

TRANSMISSION OF THE CHANCRE WITH SOFT BASE FROM SYPHILITIC SUBJECTS, UNDER THE FORM OF SIMPLE CHANCRE, NOT INFECTING.

Obs. 35. A prostitute contracts a *chancre*, which becomes the origin of constitutional syphilis. She transmits, at this epoch, an *indurated chancre*, also followed by constitutional symptoms. Some months later, she contracts a new chancre with *soft base;* she transmits it under the form of a *soft chancre, with soft base*, not followed by constitutional symptoms. Observe the case in detail.

N——, 35 years old; no venereal antecedents. Intercourse, in the second week of May, with the girl C—— (previous intercourse dating from about three months). Two chancres appear some days after the last connexion. No treatment. Actual state, July 4th: *indurated chancre* of the corona, *indurated chancre* on the extremity of the glans; bi-inguinal adenopathy, hard, multiple, and indolent; indurated dorsal lymphangitis; negative inoculation. Mercurial treatment (one, two, and three grains of the proto-iodide of mercury). In August, roseola, postero-cervical adenopathy, scabby eruption on scalp.

C—— Eugénie, aged 24; first venereal affection. Actual state, May 15th (Saint Lazare): chancre on the neck of the

uterus, with abrupt borders and greyish floor; no other symptom. Simple treatment. 17th. A new chancre appears at the fourchette, with soft base. (Consecutive inoculation). July 1st. Confluent roseola. Mercurial treatment. 25th. Papular eruption over the chest, back, and legs; posterior cervical adenopathy, scabs on scalp, alopecia.

In November, this girl again enters St. Lazare with a soft chancre, and one of our patients contracted from her a soft chancre.

R——, aged 23; blenorrhagia in 1852. Intercourse with the girl C——(Eugénie) on the 16th November. (Previous connexion dating from three months; no consecutive intercourse.) Chancre developed towards the 21st; no treatment. Actual state, 29th November: *three soft chancres* on prepuce and glans; no glandular affection. Dressed with vin aromatique; cured in eight weeks. Positive inoculation. Seen up to April, 1857; no secondary symptoms.

Obs. 36. M——, 30 years old. Antecedents: four or five attacks of gonorrhœa, the last seventeen months since. Intercourse with the girl Célestine in the course of September. (Previous connexion dating from twenty-two days.) Chancre observed at an interval of some days from the last connexion. Actual state, 22nd September: *simple chancres* on prepuce and glans, slight glandular enlargement. Dressing with vin aromatique; cataplasms. Positive inoculation. Adenite suppurates. Up to December, no constitutional affection.

B——, 23 years of age; no venereal antecedent. Intercourse with the girl Célestine towards the 25th September. (Previous intercourse dating from four months at least; no consecutive connexion.) Actual state, 30th September: three *simple chancres*. Dressing with vin aromatique; rapid cure. Seen up to April, 1857; no consecutive symptom.

L——(Célestine), 21 years of age. Antecedents: in June, 1857, *indurated chancre* on clitoris. Actual state, 18th October: *simple chancre* on fourchette, dating from several

weeks; adenopathy, bi-inguinal, indolent, dating from four months; mucous tubercles in progress of development; cervical adenopathy. Mercurial treatment. No new affection up to exit from hospital. Seen in January, 1857; no new manifestation.

FOURTH GROUP.

TRANSMISSION OF THE CHANCRE WITH SOFT BASE FROM SYPHILITIC SUBJECTS UNDER THE FORM OF INDURATED CHANCRE, FOLLOWED BY CONSTITUTIONAL SYMPTOMS.

Obs. 37, 38, 39, 40. (See pages 139, 140, 141).

FIFTH GROUP.

TRANSMISSION OF THE INDURATED CHANCRE AFTER ITS OWN KIND UPON VIRGIN SUBJECTS.

Obs. 41. H——, aged 25 years. Antecedents: vegetations in 1849; no other affection. Married in July, 1856. A week before marriage, H—— had intercourse with a prostitute; two or three days before marriage, a pimple appeared upon the integuments of the penis, to which the patient paid no attention. H—— had intercourse with his wife, and, when he consulted M. Ricord, was the subject of a chancre *parcheminé*, attended by specific inguinal pleiades. Mercurial treatment. In the following months, roseola, mucous tubercles, cervical adenopathy. The bride was also seen by M. Ricord, who recognised upon her an *indurated chancre* and specific inguinal adenopathy, followed by roseola, sore throat, alopecia, cervical adenopathy.

Obs. 42. P—— aged 35; no venereal antecedent. Married ten years ago. He had only had intercourse with his wife since marriage, when in January, 1856, he became affected with chancre. Actual state, January, 1856: *indurated chancre* of the corona, on the right side, right inguinal adenopathy, multiple, hard, and indolent. Mercurial treatment; consecutive affections, roseola, mucous tubercles, iritis.

The wife of this patient was seen also at this time; she had a *chancre parcheminé* on the fourchette, healing, with a double specific inguinal adenopathy. This woman admitted having been recently unfaithful to her husband. Consecutive symptoms; papular eruption, sore throat, mucous tubercles, cervical bubo.

Obs. 43. A young woman was treated by M. Ricord for an *indurated chancre* of the vulva. Deprived of her lover, whom she had infected, to satisfy her lust she made use of a girl, 16 years of age, and free from syphilis; this last contracted a chancre on the middle finger, with *hard base*, and attended by an axillary bubo, hard and indolent. On these two women constitutional symptoms declared themselves almost simultaneously; roseola, mucous tubercles, cervical adenopathy.

SIXTH GROUP.

TRANSMISSION OF THE INDURATED CHANCRE UPON SYPHILITIC SUBJECTS, UNDER THE FORM OF A CHANCRE WITH SOFT BASE, ANALOGOUS IN ASPECT TO THE SIMPLE CHANCRE.

Obs. 44 and 45. (See page 122).

NOTE XI.

STATISTICS OF THE EVOLUTION OF SYPHILIS.

The following statistics were drawn up by Messrs. MacCarthy, Bassereau, Sigmund, and Fournier :—

Statistics of M. MacCarthy. Space of time between the Primitive Infection and the appearance of Secondary Symptoms.

Forms.	The shortest interval.	Longest interval.	Medium.
Roseola	2 weeks	13 weeks	7 weeks
Papular eruption	6 ,,	16 ,,	10 ,,
Mucous tubercles	4 ,,	15 ,,	7 ,,
Vesicular eruption	4 ,,	5 ,,	
Pustular	11 ,,	33 months	9 months
Tubercular	5 months	18 years	10 years.

Statistics of M. Bassereau.

	Usual period of appearance.	Earliest period.	Latest period
Roseola	30 to 60 days	25th day	12th month
Papular eruption	20 to 90 ,,	25th ,,	12th ,,
Papular eruption (moist) . .	30 to 60 ,,	25th ,,	18th ,,
Vesicular eruption	early	30th ,,	6th ,,
Pustular eruption	2 to 3 months	45th ,,	4th year
Tubercular eruption . . .	after several years	11th month	40th year.

Statistics of M. Sigmund.

M. Sigmund is of opinion that secondary affections usually manifest themselves from the sixth to the twelfth week after infection.

Secondary Symptoms.

	The most frequent period of appearance.	Earliest period of appearance.	Latest period of appearance.
Syphilitic stains (roseola) .	8th week	6th week	12th week
Papules, pustules, and mucous tubercles	12th ,,	3rd ,,	12th ,,
Sore throat	12th ,,	7th ,,	12th ,,

Tertiary Symptoms.

Ulcers on the skin . .	22 months	17 months	20 years
Affections of the nails .	48 ,,	37 ,,	22 ,,
Perforation or destruction of the soft palate . . .	32 ,,	21 ,,	19 ,,
Tubercles in the cellular tissue	59 ,,	43 ,,	40 ,,
Affections of the periosteum, bones, and cartilages . .	24 ,,	3 ,,	41 ,,

Statistics of M. Fournier.

Forms.	Usual period of appearance (without treatment).	Earliest period of appearance.	Latest period of appearance (after mercurial treatment).
Roseola . .	from 40th to 50th day	28th day	120th day
Papular eruption	end of 2nd month	42nd day	
Mucous tubercles (moist) . .	3rd month	45th day	28th month*
Vesicular eruptions, herpetiform . .	3rd month	56th day	6th month

* Mucous tubercles rarely appear after the fifteenth month.

	Usual period of appearance (without treatment).	Earliest period of appearance.	Latest period of appearance (after mercurial treatment.)
Pustular, pustulo-crustaceous, pustulo-ulcerous . .	from 3rd to 10th month	70th day	4 years
Rupia . .	from 2 to 3 years	7th month	4 years
Syphilitic iritis .	from 5th to 11th month	66th day	13 months
Tubercular eruptions . .	several years after infection	4½ years	18 years
Deep serpiginous ulcers . .	very late	5 years	20 years
Syphilitic sarcocele . .	from 6th to 18th month	6th month	34 months
Gummy tumours (gommeuses)	several years	4 years	13 years
Periostoses .	first years	4 to 5 months	2 years
Exostoses .	late	2 years	20 years
Ostitis, alteration of cartilages .	very late	2 years	8 years

The above statistics entirely conform to the laws laid down by M. Ricord concerning the evolution of the syphilitic diathesis.

PART V.

URETHROTOME FOR PERINÆAL SECTION.

LETTER FROM C. F. MAUNDER, ESQ.

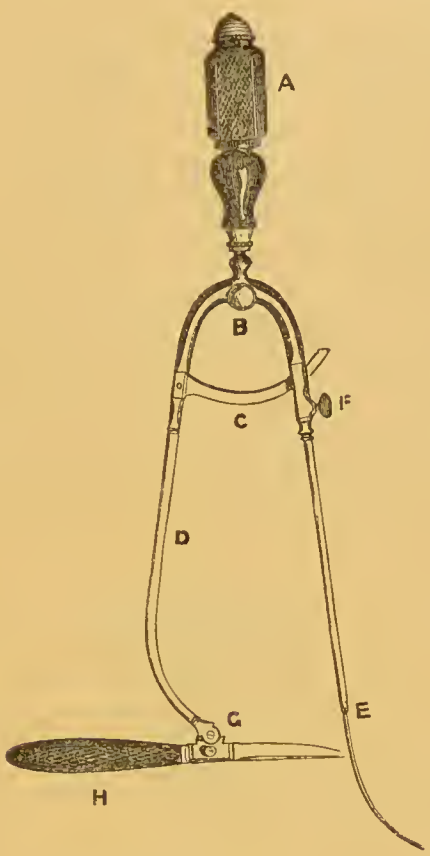
(*To the Editor of the "Medical Times and Gazette."*)

Sir,—I presume it is allowed by most surgeons, that there are certain cases of stricture of the male urethra which can only be cured either by "external incision or perinæal section."

Now, this section of the diseased parts must occasionally be made at hazard, without a director; while there are cases in which, although a catheter may be passed through the stricture into the bladder, the operation is deemed to be necessary, and may be performed with the greatest safety as regards the parts interested in the operation, provided that the director can be readily felt through the soft parts of the perinæum.

But it sometimes happens, that the soft parts are so thickened and indurated that the guide cannot be felt through them; and although the surgeon may divide the tissues with the greatest care, in order to arrive at the director, it is very possible that he may, in consequence of the altered condition of the soft parts, miss the staff, and continuing his incision on one or the other side of it, get behind the director, and so fail in the accomplishment of the operation. In order to obviate the possibility of such an accident, and ensure the finding of the guide with ease, I

beg to introduce to the notice of your readers a sketch of the Urethrotome,* which I have devised for that purpose.



A represents the handle of the instrument, which, when in use, the surgeon should hold steadily with his left hand; B marks the position of a circular joint, which allows the arm D to be moved forwards and backwards; C is an arc which ensures the moving of the arm D parallel to the arm E; E is a Syme's staff, which may be either removed or fixed at pleasure by the finger-screw F; G marks the position of a circular joint, which allows the double-edged scalpel, H, to be moved in a direction either upwards or downwards. The scalpel, H, is attached to the circular joint by a finger-screw.

* Made by Mathieu, rue de l'Ancienne Comédie, Paris.

The sketch represents the instrument in action, with the staff, E, in the stricture, and the scalpel, which has been made to penetrate the soft parts of the perinæum, with its point in the groove of the staff. To complete the operation, the handle of the knife must be depressed, when the blade rises along the groove and divides the tissues until its point is arrested by the thick portion of the staff. The stricture is now divided; and, on withdrawing the scalpel, the handle of the same should be elevated, so as to cause the blade to enlarge the wound in the perinæum, and so ensure the ready escape of urine. A Syme's staff is preferable to an ordinary grooved director, because the thicker portion having been introduced down to the stricture, and the knife having cut the tissues along the groove, up to the thicker portion of the staff, divides the stricture with certainty, and nothing more.

I am, &c.

C. F. Maunder.

29, *New Broad Street, E.C.*

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London, New Burlington Street,
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