Baruch (S.)

Reprint from Transactions S. C. Med. Ass.

PRACTICAL HINTS ON THE TREATMENT OF CATARRH.

BY S. BARUCH, M. D.,

Honorary Member South Carolina Medical Association, Surgeon to Eye, Ear and Throat Department, Northeastern Dispensary, New York City.

A multiplicity of remedies, be they from the domains of legitimate medicine, or from the fertile fields of charlatanism, offers an unerring index of the incurability of a disease. And in proportion as remedies multiply and nostrums increase, the amenability of a disease to curative treatment becomes more problematical. But not unfrequently a disease is incurable, or difficult to manage, only because simple measures are neglected in the search after specifics.

To this category belong nasal and naso-pharyngeal catarrh. These maladies have been the opprobrium of the profession for many years, and have offered a wide field for the enterprise of nostrum-mongers. To the experienced physician, who has observed a large number of cases of so-called "Catarrh" (a generic term for nasal, naso-pharyngeal and pharyngeal disease, whose chief element is an increased or entirely suppressed secretion from the surfaces involved), the fact is obvious that under favorable conditions a large proportion is amenable to curative treatment. These favorable conditions imply perseverance and obedience on the part of the patient, with proper hygienic surroundings, and a broad knowledge of the pathology and treatment of affections of the mucous membranes on the part of the medical attendant. The first factors being taken for granted, it will be my aim to indicate some of the important elements of the therapeutical problem. If I were asked what is the most important element in the latter, I would say *thorough cleansing of the diseased surfaces.* The enemy must be sought in all his recesses; he must be struck with open eyes. It will be of no avail to pursue him in the dark, groping with brush and probang, syringe and douche, atomizer and cautery, for his weak points. *Every diseased part must be seen by the eye of the attendant before medication*, and again examined to ascertain if the remedies have been applied to its entire surface. Every inflamed, congested, hypertrophied, or ulcerated point, must be carefully inspected, if we would succeed with our remedies in these obstinate affections. Any one who is conversant with the anatomy of the parts involved will realize the difficulty of this task. We have here the most tortuous passages, formed by bone, cartilage and muscle, and covered by mucous membranes, differing in their thickness, in their epithelial linings, some being erectile, some firm and

unyielding. Therefore a considerable amount of skill and dexterity are required for the thorough inspection of these passages. This dexterity may, however, be easily acquired by practice on the healthy subject, and the familiarity thus gained with the normal appearance of the part will aid the practitioner materially in his diagnosis of diseased conditions.

I do not propose to present a treatise on "Catarrh," but my aim is to offer some practical suggestions which are the fruit of somewhat extensive experience. And if I fail to say anything new, I trust that the reiteration of established points may not fall upon barren soil.

The methods of rhinoscopy are detailed in the various works on this subject. I need not refer to the manner of placing the mirror, light or head reflector, but a few seemingly minor details may prove of value to those who are unpracticed. The patient should be taught to open his mouth and keep it open. The tongue should be carefully depressed in order to admit full light upon the fauces, and the rhinoscopic mirror within the latter. Every old woman who has examined the throat by means of a spoon-handle regards herself as an expert in this art, but not so. I must say that I have met some physicians who did not understand this procedure, and I confess that I was once in that category. The patient should be asked to breathe through the widely opened mouth, just as if he were making an effort to respire with closed nostrils. While he is breathing in this manner, the surgeon should take the handle of the tongue depressor between the thumb and forefinger of his left hand and place its lingual portion slowly upon the tongue, just upon its most arched portion, or if it be quiet and flat within the mouth, upon its posterior portion, which should be gently, but firmly, drawn forward by the pressure exercised upon it. At the same time, the middle finger should be placed beneath the chin. By this manœuvre the patient's head is under complete control, because the lower jaw is held between the lingual portion of the tongue depressor and the middle finger. The amount of resistance that some tongues offer when they stand in hostile curve, not unlike the familiar feline pet when under strong provocation, must be felt to be realized It is futile to attempt to overcome this resistance by main force. Ask the patient to withdraw his tongue within his mouth, close the latter, and begin again by breathing slowly through it. In many cases a second effort will succeed. An energetic protrusion of the tongue will surely aid in producing retching when the depressor touches it, and it is here where the patient should be instructed to be calm. It is wiser to follow the example of an ancient philosopher, who never attempted to cope with the unruly tongue of his spouse, than to struggle with the organ whose size is not a correct index of its power of resistance.

I have found it most convenient to have the lamp on the right, the flame being on a line with the patient's left temple. To obtain

a full illumination of the fauces, the observance of a seemingly trivial precaution will aid the beginner materially. Always find the focus through the aperture of the head mirror, with the right eye, the left being closed. Both eyes will thus be protected from the glare of the bright light and both can be used, after the proper focus is found. for the examination. If the left eye alone be used for focusing, the right will be found obscured by the mirror, which covers it.

The rhinoscopic mirror is now introduced without touching the gum, teeth or tongue, keeping it rather closer to the velum than to the tongue. If the faucial opening be narrow, it should be passed into the pharynx, and so held that the vault of the pharynx and the posterior nares will be seen reflected upon it. I need not dwell upon the necessity of warming the little mirror over the lamp, nor upon the fact that the rhinoscopic image will be obtained only by successive inspections made by moving the little mirror in various directions. These points are explained in every text book on this subject.

The object of the first rhinoscopic inspection and of examination of the anterior portions by the speculum, should be to ascertain the presence and location of abnormal secretions, and to obtain a correct guide for their removal by cleansing solutions. The anterior nares and a small portion of the posterior surfaces can be reached best by the atomizer, the posterior nares and vault of the pharynx by the post-nasal syringe. *Neither the nasal douche nor the ordinary syringe can be relied on* to cleanse the upper meatus and turbinated bones, nor the vault of the pharynx, which is frequently the seat of hardened secretions. The stream from these instruments will not reach those parts. Sometimes a curved brush, or small mop, may be used with advantage to remove tenacious secretions from the pharyngeal dome. Any weak alkaline solution will be unirritating and effective for cleansing the parts. But I have found a formula of Dr. Dobell, of London, so useful that I resort to it invariably. It consists of one grain carbolic acid, two grains each of bicarbonate and biborate of soda, half an ounce of glycerine and one ounce of water. The strength of this solution may be increased if much tenacious mucus requires removal. The rhinoscopic mirror should be repeatedly used, to ascertain the progress of the cleaning. *Not until every diseased and healthy part presents itself plainly, should medication be thought of.* I make an exception to this rule when the secretion is not abundant, and consists simply of thin mucus.

Having now a clear field before us, the question arises: What course of local medication is best adapted to meet the indications of treatment? A matter of prime importance is the vehicle by which our remedial agents are to be applied to the diseased parts. After a trial of a number of remedies in various forms, I have discovered that more advantage accrues from the adoption of finely

powdered arrow root as a vehicle, and nitrate silver, zinc sulphate, tannin, alumn and bismuth, as the medicinal agents. The dusting of diseased mucous membranes which are prone to hypersecretion offers great superiority over aqueous, oily or glycerated applications. The powder slowly mingles with the mucus which covers these surfaces a short time after cleansing, thus forming a firmly adhering plasma, which slowly dissolves in the secretions, and permits a thorough action upon the subjacent structures. A watery solution, on the contrary, flows off by its own gravity and evaporates from the surfaces which are constantly fanned by the inspired and expired air currents.

Another advantage of the powder lies in its protective influence in acute or subacute rhinitis, giving rise to coryza. In the ordinary hyperæmic conditions of the pituitary membrane, I have found the trituration of nitrate of silver, two grains to the ounce, extremely useful, increasing the strength up to ten grains to the ounce. The upper portion of this tract over which the olfactory nerve is distributed, and which is covered by thin pavement epithelium, does not tolerate the stronger application. A two grain dilution will frequently be so irritating as to induce considerable reflex action. The lower half of the interior of the nose, which is covered by columnar, ciliated epithelium, will readily bear five to ten grains to one ounce. The powders are applied by means of the insufflator, figured in Jno. Reynders & Co.'s catalogue, 688, *a* and *b*, and in Tieman's catalogue, 364g, Part II. The former makes an adjustable covered end for the posterior nares, which may be screwed on or off. The air propelled by the rubber bulb into the bottle, agitates the powder contained in the latter, and forcibly drives it through the other tube, whence it issues as a fine dust. If the longitudinal tube is held parallel with the floor of the nose, the powder will be propelled through the lower nasal tract into the pharynx and lodge usually in the vicinity of Rosenmuller's fossa; if it be directed upwards, the powder will reach the upper nasal tract and reach the vault of the pharynx, if there be a patent posterior passage. In recent hyperæmic conditions, such as accompany acute or subacute coryza, the insufflation of bismuth and arrow root, in equal proportions, with a small quantity of morphia or camphor added, may be advantageously repeated once or twice daily. The watery secretions will be checked, the hyperæmia reduced, and with ordinary precaution in keeping the skin acting and avoiding sudden atmospheric changes, cases of this character may be brought to a favorable termination. It is unfortunate that the physician's aid is rarely called in these conditions, which often for mthe first stage of an intractable nasal Catarrh.

In more chronic conditions where sub-mucous infiltration has taken place, I begin with the two grain dilution of nitrate of silver and starch, applying it thoroughly to the thickened mucous linings through the anterior nares.

If the patient complain of much irritation as the result of this application, I wait until it has subsided. I now increase the strength of the preparation on each occasion, so soon as the irritation from the previous one is beginning to abate, until I reach ten grains to the ounce, which usually produces so much sneezing and lachrymation, and is followed by so much relief, that it is unnecessary to increase the proportion of nitrate silver. The result of the strong application is decided; a watery secretion flows from the parts in profusion, bringing with it freedom from nasal obstruction and offensive discharges. As soon as there is the slightest tendency to a more consistent discharge the application should be repeated. A proper estimate of the effect of each application formed, from the character of the secretion and from the speculum examination, will afford a guide to the necessity for repetition. If the pituitary membrane appears less hyperæmic and puffy, the nitrate silver may be reduced in strength and repeated twice a week. If the infiltration has disappeared, but left a hyperæmic surface, the weaker dilutions may be followed, or substituted by applications of alum or sulphate of zinc, with two to four parts of starch. If there be evidence of active inflammatory action induced by the strong application, bismuth and starch powder will prove soothing, if repeated three or four times a day by being snuffed up, as in acute coryza. In fine, the same rule of practice is applicable here which obtains in the treatment of similar conditions in other mucous membranes. In hyperæmic and infiltrated conditions of the lining of the posterior surfaces of the turbinated bones and of the septum, the powders may be thrown upon the diseased surfaces by means of the curved tube alluded to above, care being taken, when the adjustable end is used, to screw it on firmly. The introduction of the curved tube behind the velum palati requires attention to a few details. The tongue should be carefully depressed with the left hand. In the hollow of the right hand the bulb of the insufflator should be loosely grasped, while the bottle containing the powder is firmly held between the thumb below and forefinger above bearing upon the cork. In this manner the bulb may be easily compressed while the tube is in its proper position in the mouth. Carefully introduce the curved portion behind the velum, lower the hand so as to tilt the curved point in the direction of the posterior nares, and compress the bulb, when the powder will be seen to issue through the nostril. Repeat the same manœuvre on the other side. When the curved point is lodged within the post-nasal space, there is likely to occur a contraction of the faucial muscles, which will grasp the point firmly and prevent the proper distribution of the powder. It is futile to attempt insufflation when this condition exists. I omitted to say that the curved tube should be introduced with its curve horizontal to the tongue, and turned into a perpendicular line only after it has passed beyond the velum. The patient should be calmed by

gentle assurances at this point of the proceeding, and immediately before the powder is driven home, he should be induced to pronounce the word "on" nasally, as in the French language. The faucial muscles will thus become relaxed, and the velum will drop. At the first favorable moment the powder should be propelled into the posterior nares. This proceeding should be repeated for each side. When the hypertrophy of the mucous lining of the septum or turbinated bone is of long standing and does not yield to the above treatment, it will become necessary to resort to more heroic measures. The general practitioner need not shrink from undertaking the treatment of these conditions. An admirable method of reducing these hypertrophies will be found in the application of glacial acetic acid by means of a flat probe wrapped with cotton. The probe recommended by Dr. Bosworth, consisting of a round copper wire, whose extremity for two inches is flattened and bent at an angle of 150°, is an excellent instrument for this purpose. Open the nose with the speculum and rapidly pass the armed probe in the direction of the diseased tissue. A whitened surface seen in the rhinoscopic mirror will indicate the point touched. Guided by this, the application should, if necessary, be repeated. The probe should be armed with cotton, saturated with acetic acid on the side on which diseased structures are to be touched, or dipped into the acid, if the septum and turbinated coverings are both hypertrophied. Some patients complain of great pain, and their eyes become suffused. But the pain may be instantly relieved by the injection of Dobell's solution. A watery secretion will follow the cauterization, and when the latter has been thoroughly done, a slough will separate in a few days, leaving an abraded surface. As soon as the irritation subsides, other applications may be made, if it be deemed necessary, to restore the normal patency of the canal. Great relief will follow the accomplishment of the latter, and the discharge also will be diminished. If the cauterized surface remains irritated, soothing applications of bismuth, morphia and starch will be called for. The galvano-cautery is used with much success in these cases of hypertrophic nasal Catarrh. But, as I am writing practical notes for the general practitioner, I will not describe this method, which requires expensive and complicated apparatus.

Compressed air is used by specialists for propelling liquids for atomization, and powders for insufflation into the nose, throat and larynx. But I am convinced that the general practitioner will find the ordinary double bulb atomizer sufficient for all purposes. The single bulb atomizer is worthless for office use, but is an excellent substitute for the nasal douche for applications by the patient himself. For throwing powders, also, the single bulb will answer, if the tube is long.

If the secretions are abundant, the nose will require cleansing. For this purpose, Dobell's solution, applied by means of the per-

fume atomizer, will be found very useful. I have discarded the nasal douche and the snuffing up of solutions into the nostrils, because of their occasional serious results, except in patients of intelligence. Only a few days ago, I was called to a little girl who was suffering from a purulent otitis media, with perforation of the drum head, which was caused by snuffing salt water into the nostrils for a coryza. This treatment had been recommended to her mother by an eminent specialist of this city, and she prescribed it for her child. Immediately after one of these insufflations, the latter complained of severe pain in the left ear, which continued, and grew progressively worse, until it culminated in the bursting of an abscess through the tympanum. I also saw a similar case in the person of a physician, who had disregarded or forgotten my warnings.

The nasal douche and insufflation would, however, be free from danger if two single precautions were observed. Never prescribe salt water at all, and always enforce upon the patient the strict injunction that he must not, after the introduction of any fluid into the nasal cavities, blow his nose, nor sneeze while the mouth is closed. There should be an outlet for the forcibly expelled air if we would avoid the driving of retained fluids into the eustachian tubes. For this reason, also, Politzer's inflation of the middle ear should never follow immediately after the nose has been syringed, in cases where this treatment is necessary. I am not aware of any case of middle ear trouble having been reported from the use of solutions of bicarbonate of soda or Dobell's solution. Hence I desire to reiterate that the employment of the atomizer and alkaline solutions, with a remembrance of the above warning, will render the danger from ear trouble almost *nil.*

Many cases of Catarrh are maintained by the habit of nose cleaning now so much in vogue. Patients should be made to learn that the delicate lining of the nasal cavities will not brook this frequent scouring without resenting it.