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ON

THROAT COUGH:

ITS CAUSES AND TREATMENT.

BY

GEORGE DUNCAN GIBB, M.D., M.A.,

MEMBER ROYAL COLLEGE PHYSICIANS, LONDON;

SISTANT-PHYSICIAN AND LECTURER ON FORENSIC MEDICINE, WESTMINSTER HOSPITAL.

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ON THROAT COUGH:

ITS CAUSES AND TREATMENT.

The title given to the present essay might be objected to as a somewhat anomalous one; indeed, at first sight, it seems quite problematical how a cough could come from the throat; nevertheless as cough does occur in both throat and laryngeal affections without any manifestation of actual disease in the chest, unless purely from sympathy, the expression of throat cough has been selected as a suitable one under such circumstances, to distinguish it from any other cough proceeding from disease of the lungs or bronchial tubes. As the modified states of the pulmonary cough occurring in chest disease have been considered by writers on auscultation (especially Dr. Walshe) under the divisions of bronchial cough, cavernous cough, and amphoric cough, so are we justified, it appears to me, in speaking of tracheal cough, laryngeal, and epiglottic or throat cough, according to the seat of the disease more particularly giving rise to it. There is an excellent precedent for this, first established by myself, in relation to the great inconvenience of difficulty in swallowing, known as dysphagia, which, in my writings, has been divided according to its situation and the condition which produces it.* And this is in reality a matter of great importance in estimating our diagnosis, oftentimes in affections of the utmost moment, when the prognosis is waited for with the greatest anxiety.

It is hoped, therefore, that henceforth *throat cough* will be

* See the second edition of my work, "On Diseases of tho Throat,"—chapter on Dysphagia.

accepted as an actual entity, whether looked upon as a symptom merely, or as an independent affection. Indeed as the phonetic sonorousness of cough cannot occur without some contraction of the glottis during the expiratory effort, its tone being necessarily modified by the particular form of lung disease giving rise to it, we may correctly assert that the larynx has much to do with cough. This is not invalidated by the occurrence of a variety of cough in cases of artificial tracheal fistulæ.

As throat cough has presented itself to my notice under various conditions, as regards the causes giving rise to it, and as relates to the precise seat of these latter, it will be expedient to divide the subject, for the purposes of distinctive diagnosis, into three classes, viz.—1st, *Throat cough* in its distinctive sense, wherein the cough originates from causes existing in some part of the throat wholly above the larynx ; 2nd, *Laryngeal* or *croupy cough*, produced by some cause, for the most part confined to the larynx ; and 3rd, *Tracheal cough*, wherein some affection of the tube of the trachea gives rise to the cough. There may be modifications of these, or a mixture of two of them, or perhaps of all three in certain instances. The point of importance, however, for the physician is to determine whether the cough is induced by lung disease or from disease in some part of the throat or windpipe. If the latter, and the cause is clearly recognisable, the treatment is widely different, and in many cases the cough, although existing for many years, and supposed to be of a phthisical nature, is dispelled as it were by magic on healing or removing the local condition giving rise to it. To the well informed practitioner not versed in the use of the laryngoscope this may appear very improbable, especially in cases of tracheal cough, but a careful investigation of the subject will in time convert those who may be sceptical at the present moment of the powers of revelation which this useful instrument furnishes to inspect the hidden secrets of parts heretofore inaccessible to ordinary vision. It is scarcely possible to mistake a well marked case of true thoracic disease, yet cases do present themselves in practice which so strongly simulate such that it behoves the practitioner to call all the resources of our art to his aid, to assist him in thoroughly making out the true seat of the malady. This will become apparent to some extent in the few cases selected as examples, and narrated further on. Many instances have occurred to me of throat or laryngeal disease associated with more or less cough, in which the morbid influence has extended to the chest, and the general malady has then become so complicated that our efforts to cure are at best but palliative. As throat affections are now

receiving more attention than they did formerly, from the numerous and valued appliances at our command for inspection and diagnosis, it is to be hoped that they will become more curable, from the fact of their being seen at an earlier period, when the treatment is comparatively simple. Throat cough in some one of its forms is so frequent a concomitant, and sometimes so masks the true seat of the disease, that I may be excused for drawing particular attention to it. It will be seen from what is here stated, that what is called as "*only a throat cough*" possesses more significance than is usually attached to it. From being at first a mere trifle, it becomes magnified into something of greater importance; this applies especially to the larynx and trachea.

We will now briefly narrate the causes which give rise to each form of cough, firstly taking those of the true *throat cough*, from their originating in some part of the throat properly so called. These are :—

Ulcers at the base of the tongue in the valleculæ or fossæ there situated, anterior to the base of the free portion of the epiglottis. These may extend to the lingual surface of the epiglottis, or to the folds of membrane on either side, and keep up an incessant hacking cough, as if the result of breaking down of tubercle in the lung, when no physical sign of such a disease is present. This condition is occasionally observed in follicular disease of the throat.

Pendency of the epiglottis, accompanied by chronic inflammation and even ulceration of its laryngeal surface, with extreme irritability of the opposed surfaces of the cartilage and its proper folds, not only gives rise to an irritable and distressing cough, but at times a feeling of threatened suffocation.

Extensive ulceration of the epiglottis with solution of its substance, proceeding to the destruction of the whole or greater part of the free portion, co-existing most generally with ulceration of the immediately contiguous structures, *e.g.*, the aryteno-epiglottidean folds, arytenoid cartilages, and interior of the larynx generally, are fertile sources of cough. The disease then becomes converted into phthisis laryngea, and the cough, which was at first from the throat, becomes laryngeal, and finally thoracic, for the lungs are ultimately involved.

Follicular disease of the fauces and larynx, with its attendant phenomena, occasionally combined with ulceration of the follicles, or enlargement, and pouring out mucus, gives rise to irritation, cough, and constant desire of expulsion of phlegm.

Lodgment of foreign bodies, such as crumbs, raisin stalks,

nutshells, fish bones, &c., in the fossæ between the lateral boundaries of the larynx and the walls of the pharynx, are also causes, the floor of the cavity being formed by the horn of the hyoid bone. Ulceration is occasionally present here, and now and then the fossæ of one or both sides become hypertrophied, and form sacs large enough to hold a teaspoonful of fluid, giving rise at times to a choking cough. The other conditions, also, keep up an irritating cough, simulating an attack of bronchitis, which is quickly relieved on the cure or removal of the exciting cause.

Ulceration and inflammation of the pharyngeal surface of the posterior part of the cricoid cartilage, accompanied with painful dysphagia, and regurgitation or rejection of food, produce not only a distressing and severe cough, but now and then urgent dyspnœa.

Perforative ulceration of the soft palate, with acute inflammation of the throat, generally specific in its nature, is attended with cough and much expectoration of pus and mucus, simulating hectic.

An elongated uvula, associated or not with a pendent epiglottis, produces at times the most irritating suffocating cough, attended with a sensation of more or less constant tickling, which keeps up an incessant hemming and coughing.

Enlarged tonsils, from the irritation they set up in some persons, give rise to cough and expectoration of mucus secreted from the neighbouring follicles.

Such are the chief varieties of cough originating from some morbid condition in the throat. If, however, the subject be proceeded with, it will be found that other circumstances in which the larynx is involved, give rise to what may be called *laryngeal cough*. Chronic inflammation of some portion of the mucous membrane of the larynx, with thickening, ulceration, and swelling, induce troublesome and persistent cough.

Closure of the ventricles, by the extension of a sort of false membrane from the lower margin of the false to the inner attached border of the true vocal chords, associated with a chronic congestion of the last, and some amount of thickening, originates a loud and hoarse cough, and an equally loud and hoarse voice.

Extreme thickening of the epiglottis, which resembles the walls of one side of a crater, with inflammation of the free margin, and probably laryngeal surface, and ulceration of the posterior part of the interior of the larynx, which may be limited, or extends deeply, is attended with a severe, constant, and painful cough, occasionally associated with dysphagia, and aphonia. This state of things has been observed by me

in so many cases of acute phthisis, and occasionally in the more chronic form, that I might speak of it as almost pathognomonic of acute tuberculosis. I have seen it before a trace of disease existed in the lungs, yet so rapid is its progress, that tubercle is deposited with the utmost rapidity, great and urgent dyspnœa sets in, extremely rapid breathing, and death from extensive consolidation, generally of the lower lobes of both lungs. This condition is given here as producing throat cough, firstly, and subsequently chest cough, but it may be correctly stated, that the cough is for the most part of a painful laryngeal character throughout.

Next to the foregoing we have the peculiar cough, originating in minute or disseminated ulceration of some part of the larynx. This may or may not be associated with pulmonary tuberculosis. At any rate if it be, the character of the cough is changed, it becomes much aggravated, and the chest disease often runs along *pari passu* with the laryngeal, although it frequently outstrips the latter in the rapidity of its termination to a fatal issue.

A not uncommon cause of a hacking and apparently bronchitic cough is irritation or irritative congestion of the anterior part of the subglottis, which is seen to be red, excoriated sometimes, and even ulcerated, giving rise to the secretion of phlegm, occasionally mucus, muco-purulent, or truly fibrinous in its character. Such a condition is not unfrequently associated with congestion and thickening of the mucous membrane of the trachea.

Growths in the subglottis, on one or both sides, give rise to a truly distinctive form of strictly laryngeal cough—a term commonly entered up in such cases in my note-books. Varieties of the same form of cough, are induced by growths in other parts of the interior of the larynx, associated with or without aphonia and hoarseness.

Acute or chronic chorditis vocalis—aphonia arising from inflammation of the vocal chords—may be associated with cough, according to the amount of irritation present, and discomfort arising from it.

In this category might be included inflammation, suppuration, and death of some one, or portion of, the laryngeal cartilages, especially of the arytenoid and cricoid. In necrosis of the arytenoid not only are the symptoms most distressing, and the patient frequently threatened with suffocation during deglutition, but the cough is of a violent hacking character, with abundant expectoration of mucus and pus combined, and unless the laryngeal disease speedily comes to an issue, the lungs are invaded, and the patient is sacrificed.

Certain diseases of the os hyoides may be mentioned as

producing laryngeal, or throat cough. These are inflammation of the body, or of one horn, proceeding to necrosis and suppurative expulsion, or simple periostitis of some part. In the former, phthisis pulmonalis has several times been diagnosed when, on expulsion of the bone, a rapid and complete recovery has ensued.

It will be apparent that the conditions giving rise to cough in the larynx are even of more importance than those originating in the throat itself.

And, lastly, of cough proceeding from the trachea—*the tracheal cough.* Acute or chronic inflammation of the mucous lining of the trachea (excluding croup in the child) produces cough the same as similar conditions of the bronchial tubes. In many obscure and doubtful cases of cough, with nothing whatever to account for this symptom within the chest, the cause has been made out, after very careful examination, to originate wholly and entirely in the trachea, and when treated in accordance with such a discovery, an effectual and speedy recovery has followed. Sometimes the inflamed or congested membrane has been attacked with ulceration, extending even into the commencement of the bronchi, and a cure has fortunately been effected with perseverance and care.

Such a series of conditions as the foregoing, giving rise to cough in the throat, larynx, and trachea, will perhaps astonish those who have not paid any attention to the subject; but when it is stated that all have been carefully made out with the aid of the laryngoscope after patient and diligent investigation in a considerable number of cases, in both public and private practice, the conscientious and painstaking physician will aid my efforts to propagate truth and scientific medicine, by investigating for himself what has been brought under his notice, and confirming what is already becoming familiar to the select few who are working out the different branches of the pathology of the throat and larynx.

The observation might be made that the causes of cough already given include the greater number of throat and laryngeal affections, but such is not the case. A fair proportion are associated with cough, and as has been already stated, so strong is the simulation of pulmonary cough by some of them that the actual cause producing the cough is overlooked. My main object in this essay, therefore, is to draw attention to the subject, so that a clear and good distinctive diagnosis may be made with the aid of the laryngoscope, and the lesion present producing or giving rise to the cough cured. A few cases have been selected from my note-books in illustration of the varieties of throat cough. They show what may be done in the way of treatment, and how suc-

cessful it proves when the local and easily accessible cause is removed. Patients affected with cough are always anxious to believe its situation to be in the throat, and of the number who have so consulted me, their belief was not wrong in a fair proportion. Expectoration again may proceed in large quantities from the larynx and the throat, poured out by the numerous follicles in those parts, either themselves diseased or irritated to excessive action by neighbouring disease. This, and cough combined, have strongly resembled consumption of the lungs.

The limits of this essay will not permit me to give more than the following dozen cases, which are narrated briefly, and at the same time clearly enough to show the cause of the cough, and how it was got rid of.

Throat Cough simulating disease of the Chest, from follicular disease of the throat and larynx, and complete pendency of the epiglottis; cure in 10 days.—Mr. J. G. D., aged 41, consulted me August 29, 1864. Had been suffering from a relaxed and follicular throat for nine months, with constant cough, and hemming and hawking of phlegm; the slightest draught of air not only increased these symptoms, but produced hoarseness and difficulty of speaking. He had been ill on previous occasions, and the sponge probang was freely applied, generally followed by a feeling of intense suffocation, lasting for many minutes. He was so much distressed and worn out, that he had made up his mind to die, under the impression that he was fast breaking up from disease of the chest and throat together. At one time he was in the habit of taking as much as $\frac{3}{4}$ of an oz. of snuff daily, but did not now use it. Besides the extremely granular condition of the fauces, extending upwards to the base of the sphenoid, and downwards as far as could be seen, the laryngeal mirror revealed a pendent and quite flat epiglottis, its lingual surface streaked with large red vessels, and so completely immovable that the interior of the larynx could not be seen, unless with great difficulty. The lungs were perfectly sound, yet he had worn a respirator for some time. The mucous membrane of the larynx was pulpy, congested, and pouring out mucus, and little follicular dots of redness were seen here and there. He was at once put upon constitutional treatment of a supporting, bracing, and yet alterative kind, and local treatment was carried out as well. On the 2nd September, the fourth day of treatment he did not look like the same person, his cough had diminished, the face was clear, eyes bright, epiglottis more erect, and there was very much less discomfort. With the aid of the mirror an argental shower was sprinkled upon the interior of the larynx with ease. By the 8th the epiglottis

was still further elevated, the cough quite gone, all irritation had subsided, and he could expand and fill his chest with air, permitting him to feel altogether a new man. He left for Devonshire a few days after, cured.

Throat Cough of a violent character, with constant tickling, induced by an extremely long uvula, pendency of the epiglottis, and follicular disease; satisfactory cure.—The Rev. A. J. L., aged 60, consulted me January 6th, 1864, recommended by Mr. Thos. Hunt, under whose care he had been for a cutaneous malady.

He had been subject to a throat cough for more than twelve months, and had wholly to give up preaching. When he coughed he said it shook his head to pieces, but it was always easier when phlegm was expectorated. His general health had suffered in consequence. Inspection with the laryngeal mirror and the eye explained all, for the epiglottis was found to be pendent and quite flat, its lingual surface being streaked with vessels. The uvula was elongated, with its terminal end formed of mucous membrane alone, quite moveable and constantly tickling the epiglottis, and so causing the cough. The throat was follicular, and I freely applied topical agents to it. His lungs were quite sound.

He improved under treatment, but the cough and tickling persisted until the 10th of March, when I removed the loose piece of membrane at the end of the uvula; the effect of this was, that by the 30th he was able to read aloud quite well, and had his old voice back again; and shortly after he commenced to preach, and resumed his regular clerical duties. The epiglottis now became a little more elevated, and his general health wonderfully improved.

When this gentleman first came to me, his cough, hemming and hawking, gave the impression that he had serious old bronchitic disease, and previously all the treatment had been directed towards relieving the chest malady, the throat being quite overlooked. I was not satisfied until, on examination, I found his chest quite normal, and that the cough originated in the throat. His cure then was promised with certainty, on removal of the chief exciting cause of the cough.

Throat Cough, loss of voice for seven months, and difficulty of swallowing, from extensive ulceration, and loss of the soft palate, with thickening, inflammation, and unyielding erection of the epiglottis; good recovery.—Mrs. S., a young married lady, aged 26, came to me from Mr. Quain, on the 7th July, 1864, for laryngoscopic inspection. She had been under his care for sloughing of the soft palate and other parts, which began a year ago when abroad. The progress of the disease he had arrested, but for the last few days she had much cough, and

inability to swallow without fits of coughing. Mr. Quain thought there was an extension of the ulceration towards the glottis, and he wished me to examine her with the laryngoscope. I learnt from her that her voice had been gone for seven months, and she had eaten nothing for three days. The laryngoscope showed thickening, oblique permanent erection, and some inflammation of the epiglottis, with a similar condition extending to the interior of the larynx, but no visible ulceration. There was superficial ulceration low down in the pharynx on the right side, and inflammation of the right thyro-hyoid ligament. The chief cause of the dysphagia and cough was now the thickened and unyielding condition of the epiglottis, for which I suggested amongst other things, sucking pieces of ice. My prognosis was doubtful from the condition of the epiglottis, for it simulated that occasionally seen in the acute form of phthisis. The velum, uvula, and other parts were gone, yet the posterior nares were free from ulceration, and perfectly healthy. She went to Sheffield after this, and in a letter to her medical adviser, I suggested feeding by the stomach-tube if neeessary, in addition to treatment.

On the 5th September she called upon me wonderfully better, her general health had much improved, the voice was restored, but of a rhinophonic character ; she had no cough at all. The epiglottis and entire larynx were normal ; there was no dysphagia, and beyond the terrible loss she had sustained in the mouth, she was comparatively quite well. There was quite sufficient to explain the presenee of the cough in this case, and I had at one time anxious fears for the result.

Very severe and distressing Laryngeal Cough, and copious expectoration, with hoarseness and pain in the Chest, from ulceration at the back of the larynx; cure in ten days.—The Rev. James D. D., aged 51, consulted me 20th May, 1864. His history was that he had ulcers in the throat in April, 1863, and in March, 1864 ; on the latter occasion he lost his voice. When I saw him he was hoarse, had pain in the side, and was coughing constantly, with thick mucous expectoration, ejected by mueh hemming and hawking. For the last month he felt a weight in the chest, and most aeute pain at eertain times, almost taking his breath away. His general health was good, and his appetite and spirits perfect. He felt as if there was a lump at the back of the throat when he swallowed, and his nose and throat constantly required to be cleared of mucus. Had ceased to do duty for some time, and much talking produced violent coughing. Treatment had been hitherto fruitless. The laryngoscope revealed a large ulcer, in front of and between the two arytenoid cartilages, with

irregular, prominent, and red margins; the vocal chords were congested, and the larynx was otherwise normal. His treatment consisted of showers of various solutions, chiefly of zinc and preparations of silver, together with tonic and alterative medicines, and soothing and mildly astringent gargles. In ten days, that is to say by the 1st of June, the ulcer had healed, the cough had wholly and completely vanished, the expectoration had ceased, and his voice had resumed its natural tone, of a fine baritone, for which his father, a well known Admiral, who served in the Crimean war, was celebrated. With the exception of a mild return of his old complaint, from the 10th to the 18th of October, following a cold, he has continued quite well.

It may be remarked that the rapidity with which the cough diminished in this case was most striking, as soon as its exciting cause was removed. There was no chest manifestation whatsoever at any time.

Distressing and severe Laryngeal Cough, with hoarseness for nearly five years, produced by a large growth in the left subglottic region.—Mr. P., aged 64, consulted me October 10th, 1864, recommended by Mr. T. Bickerton, of Liverpool. He had been a sufferer for the period of six years, from chronic disease of the throat, associated with hoarseness for nearly five years. Began to get worse last Christmas, with no regular chest cough, but one of a distinctly laryngeal character, kept up by a desire to expel a little mucous phlegm from the larynx. His breathing was rough, and at times associated with stridor. General health and appetite good; breath short on going up stairs, followed by copious perspiration. Voice was hoarse and low, but not actually gone.

Laryngoscopy showed general disease of the pharynx, with scooped out and enlarged follicles. Epiglottis pendent, and twisted towards the right side, permitting only of a slow and gradual view of the larynx. Both vocal chords had lost their white colour, and were thickened, narrowed, and of a pinkish drab colour. Beneath the left, and partly involving it, was a large projection or growth, occupying the entire left side of the subglottis, with a broad base, and extending fully to the middle of the cricoid area. It met the right vocal chord, on attempting sounds, and its surface was raw, as if ulcerated. There was ulceration at the posterior part of the larynx, running down to the growth. Here was the explanation of the cough and hoarseness. I treated him with showers of nitrate of silver solution, and constitutional remedies, healing up the ulcers and lessening the irritability and spasm of the glottis with such good effect as to greatly diminish the cough; but

all attempts to touch the growth with any instrument were impossible, for the spasm was such as to threaten suffocation. The lungs were sound, and he is now under Mr. Bickerton's care.

Severe hacking irritative Cough, constantly present for 6 months, proceeding from the larynx ; cure in a fortnight.—Mrs. Lydia B—, aged 58, consulted me June 23, 1863, recommended by Dr. Hy. G. Wright, of Somerset Street. She has had a harassing and constant cough for 6 months, with a desire to expectorate but without the expulsion of any mucus. Three weeks ago, lost her voice, it returned, but every afternoon hoarseness sets in and the voice goes. She has sore throat as well, very bad at night, and cannot swallow with it; copious nightly perspirations and "cold shivers." The cough is loud and dry, besides being hacking and constant. No disease was discoverable in the chest; but on introducing the laryngeal mirror, the epiglottis was seen to be a little pendent, much care-worn, and streaked with vessels, projecting towards the right side. The action of the vocal chords was irregular, especially in the left, which seemed sluggish and partly paralysed; it was rough also and discoloured, serrated on its free-border, and did not form a parallel with its fellow on approximation. The margins of the left ventricle were very red. The throat was much congested, the follicles enlarged, and the membrane relaxed. Mild local treatment was carried out every second day, and bromide of ammonium given in full doses, internally. The result of this was that the cough disappeared in two weeks, and the larynx was restored to its healthy condition. At first I could scarcely believe that the cough proceeded from the condition of the throat and larynx, yet on restoring these latter to a healthy state it quickly disappeared.

I had my doubts as to the propriety of giving the next case in this essay, because of the presence of phthisis, yet, as the malady was in the first stage, and the cough was kept up solely by the condition in the larynx, I feel justified in doing so.

Consumption in the first stage, cough kept up by the state of the larynx, the lining membrane resembling thick red-pile velvet; its disappearance on curing the latter.—Miss W., aged 26, consulted me, August 20th, 1863, for her cough and throat. There was a well-marked phthisical history, for she had lost brothers and sisters by the complaint. She had spent the last four winters at Torquay and Clifton. The last winter at Torquay she suffered from relaxed throat and incessant cough, losing her voice occasionally. She said she had a double pleurisy there. The sore throat has continued with a continual

cough, and yellow expectoration, not purulent. She had not lost flesh, but was depressed and languid. A careful examination of the chest revealed the commencement of the first stage of consumption, but with no rales of any kind present; there was no dulness anywhere, yet the condition of the breathing and other physical signs unmistakeably pointed to what was going on. The velum palati and uvula were granular; the larynx was extremely congested, and the mucous membrane swollen, and looking like thick red-pile velvet on the false vocal chords and laryngeal surface of the epiglottis. I at once applied a strong solution of nitrate of silver with a brush, and repeated it on a few occasions, with the effect of removing the congestion and thickening, and arresting the cough, and thus staying the progress of her family disease. I treated her for a throat affection in the usual way, and it removed a cough which clearly originated in the larynx. With the phthisical tendency present in this case, I found much benefit to accrue from the tincture of sanguinaria, given internally with other agents.

Hoarseness and Tracheal Cough, the result of chronic inflammation of the trachea and subglottis, the sequel most probably of an attack of scarlet fever; cure in a fortnight.—Miss E. L. M., aged 23, a young lady from Lincoln, consulted me on the 29th January, 1864. She had been delicate from a child, as her medical attendant Dr. Lowe informed me, and ever since she had scarlet fever twelve months ago, was subject to attacks of hoarseness, and a short, hard, irritable cough. The slightest exertion of the voice even brought on both. By the advice of Mr. Erichsen, she had had the larynx mopped out with a solution of nitrate of silver, and was put upon tonic treatment, but the relief was but temporary. She was recommended to go to a drier climate, but she said she would be guided by my opinion. The catamenia were regular, and the lungs perfectly sound. Her voice was soft and melodious, but became hoarse after a little reading. I learnt from her that she had had a cough for probably four or five years, and that summer or winter she did not lose it. Had not been able to sing for three years.

Laryngoscopy showed the membrane of the larynx pale, with some relaxation and slight redness of the right side. The vocal chords were normal. From the subglottis downwards into the lower trachea, the lining membrane was in a state of general hyperæmia, partaking of the character of chronic inflammation in the upper part of the tube. The membrane of the fauces was a little relaxed. No other condition was present to account for the cough, but that observed in the trachea and subglottis, and topical treatment was

carefully commenced, as well as strengthening constitutional. Every two or three days some local application was made to the parts specially affected by means of my fluid pulverizer, and showers of various solutions sprinkled the parts with the greatest accuracy. The result of this was, the cough gradually subsided as the trachea and subglottis were restored to a natural condition, and in a fortnight she was cured. I saw her subsequently as she passed through town in May and June, and have heard from her friends up to quite recently, and the cure has been permanent, for her tracheal cough has never returned, and both her singing and speaking voice are unimpaired.

In another instance of a lady, aged 50, who was under my care at the same time as in the last mentioned case, severe cough and irritation of the throat were present for many years, attributed to the taking of arsenic and iodine for psoriasis. A little congestion of the larynx and epiglottis was observed, and much old inflammatory redness and thickening of the mucous membrane of the trachea. Five applications of showers of various solutions effected a perfect cure, with some suitable constitutional treatment.

In still another example, severe tracheal cough and dyspnœa were kept up by inflammation of the lower part of the trachea, especially on the right side, extending into the bronchi, the right bronchus probably ulcerated with constriction, partially accounting for the dyspnœa ; indeed, the symptoms had pointed to this for two years, such as severe cutting pain, corresponding to the situation of the bifurcation of the trachea.

In another case, recently seen with Mr. Hammerton, of Piccadilly, the most violent hacking cough could be attributed to no other cause than extreme congestion of the entire trachea, and probably of the larger bronchi. The chest symptoms were utterly insignificant, the lungs had been pronounced quite sound by Dr. Williams, and the cough was said to partake of a nervous character.

From the few examples I have given, it must be admitted that not only does a cough originate in the throat, larynx, and trachea, quite independently of true disease of the lungs, but that remedies applied under the impression that the lungs are involved, will not cure it. Pharyngoscopy, laryngoscopy, and tracheoscopy will determine its nature, and the cure, if the malady be not too far advanced, is within the reach of probability. I trust, however, that sufficient has been stated in this short essay to prove that *throat cough* is neither an anomalous symptom, nor an unrecognised fact, capable of explanation in the simplest manner.

I may add, in conclusion, that although no rules can laid down for the diagnosis of the precise seat of a thro cough by the mere character of the sound it produces, a pr position, which is in reality an absurdity, yet as such a o was actually submitted to me, I may say that it is quite po sible to recognize a cough arising from a pendent epiglott or from obstruction below the glottis confined to one or bo sides. The special cause giving rise to the cough can determined only, in the majority of cases, by a careful exar nation with the laryngoscope, when the course to be pursu is obvious.

The foregoing essay formed the subject of a paper re before the Medical Society of London, and the importance the subject has induced the author to have it reprinted fro the pages of the "Medical Mirror."

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