

## (8) THE PRONOUNCED AND ADVANCED ULCERATIVE STAGE.

It is rare to find extensive ulceration of larynx without widespread pulmonary tuberculosis. In the few cases which form an exception to this rule, where the ulcerative process in the larynx predominates, and where there is great infiltration leading to tuberculous tumours of larynx or to dangerous œdema, operative procedure may be adopted. Tracheotomy has sometimes to be performed, and even thyrotomy, with removal of the diseased parts or excision of the larynx. Such cases seldom recover, but recovery has resulted on rare occasions. This complication in cases where pulmonary tuberculosis is also serious renders the case practically hopeless.

The treatment is that of the relief of symptoms. Pain is usually caused by movements of the larynx by speaking and swallowing, and occurs when there is ulceration or swelling of epiglottis, and when there is perichondritis of the cartilaginous structures. In the former condition, especially if the upper surface is affected, a gargle of borax and opium will relieve. Cocaine lozenges and sprays, given shortly before food, are most valuable. When these fail, and the pain is caused by laryngeal and deep-seated ulceration, there is no remedy so valuable as the insufflation of orthoform. The insufflation of a powder containing  $\frac{1}{4}$  gr. of morphine with boracic acid or starch or sugar powder gives relief, but is not to be compared with the effect of orthoform. For the distressing salivation of advanced cases we have no certain remedy.

In conclusion, I wish to impress the importance of watching and alleviating any early catarrhal affection of larynx. This premonitory stage is remediable by treatment. The early ulcerative process is hopeful, provided the lung disease is not extensive. When the laryngeal symptoms preponderate, operative procedure may be advisable. The stages of extensive ulceration of larynx, when accompanied by serious disease of lungs, are hopeless, and are only to be treated by palliative measures.

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**SOME OBSERVATIONS ON THE TREATMENT OF  
LARYNGEAL TUBERCULOSIS.**

BY L. GRUENWALD, M.D.,  
Reichenhall-Munich.

To give within a small compass a detailed account of the treatment of laryngeal tuberculosis one would have to be dogmatic, and this

is entirely inappropriate to a subject on which opinions are constantly changing and where one's own views demand an explicit justification. I will thus confine my remarks in the first place to some points important in practice. But first of all I must mention something so self-evident that it may almost appear a paradox. In treating laryngeal tuberculosis, make sure that you have to do with tuberculosis. It may perhaps be said that such an elementary requisition need scarcely be put at this time, fifty years after the invention of the laryngoscope. The demand seems too simple, at least to all those self-confident specialists to whom, in reliance on their rich experience, one glance is sufficient to form a diagnosis which is "the easiest in the world." For when a patient has pulmonary disease and is hoarse in addition, what else can he suffer from but laryngeal phthisis? But let us be cautious; the patient may suffer from anything else, and I may specially mention one possible cause of his illness, viz. syphilis. And if one or another of my brother specialists perhaps rightly says that he has that experienced eye which excludes all doubts, I, at least, will freely confess that I do not possess it. Experience has taught me differently, and I am comforted by the knowledge that I do not stand alone in this respect. Krieg,<sup>1</sup> a most experienced observer, frankly avows that he has treated four cases for a prolonged time as tubercular which later on he recognised as syphilitic, and further, that in some other cases he may not even have discovered his error, though this mistake could only rarely have happened to him, as he kept in mind the possibility of its occurrence.

I need not mention here all diseases which may and have given rise to a wrong diagnosis, as, for instance, carcinoma. I will simply emphasise that there is only one remedy which under all circumstances can protect us from mistakes, and that is *prolonged and accurate observation*. This must, therefore, if at all possible, be a fundamental principle, previous to the adoption of more energetic therapeutic or operative measures, or before such cases are recorded in literature.

Symptoms like severe dyspnoea or dysphagia may urgently demand therapeutic action and leave no time for prolonged observation. By the occurrence of both of these symptoms in a severe form I was once led urgently to perform laryngotomy, but the subsequent microscopical examination neither dispersed, as unjustifiable, all doubts as to tuberculosis, nor excluded syphilis. Whenever one has time, therefore, prolonged observation is necessary, and this

<sup>1</sup> *Archiv für Laryngologie*, xvi, 2, 1904.

is also the case for the following reason. The prognosis of tuberculosis is more perhaps than that of any other disease entirely "clinical"—*i.e.* it can only be made from its course. Each case by itself shows only whether it possesses healing tendencies, whether it may come to a standstill under favourable condition, whether it is one able to bear more severe therapeutic measures, or finally whether it is one "galloping" to an unavoidable and speedy fatal issue. Though we know a series of factors which influence our prognosis in a favourable or unfavourable sense, as, for instance, the external conditions of the patient, his apparent constitution and build of body, his age, temperature, digestive functions, any complicating diseases, etc., we still now and again come across a single case which throws into a heap all the rules of our accumulated experience, and shows us that it is only the accurate valuation of the past of each individual case which allows us to estimate its individual future. It is not always necessary for us to observe this fact ourselves; a reliable history of the case as observed by the medical attendant, but not that given by the patient himself, will often satisfy our demands, but it must be sufficiently explicit and precise, and must illustrate the course of the patient's illness by the unmistakable data of physical diagnosis. Only then it will be possible to predict whether larger operative measures give a prospect, not only of a successful healing of the operation wound, but of a cure of the patient. And the basis of this prognosis is, as I wish to say again most emphatically, *prolonged and accurate observation*. This period may be employed for the administration of conservative therapeutic measures.

We are accustomed, where throat and lungs are simultaneously affected, to lay the greater weight on the treatment of the lung affection, no doubt with justification, for it is the lung disease which usually threatens most the life of the patient, but it is the throat affection which gives rise to most discomfort and pain. A cure of the one is impossible without the cure of the other. It is therefore necessary to relieve the throat affection when the pulmonary disease is to be cured, for otherwise the strength of the patient may be undermined by the pain, the cough, or by difficulty of deglutition, not forgetting the noxious influence of the absorption of toxins. *Thus in hopeful cases the treatment of a laryngeal affection must take precedence over that of the lung.* Local treatment will naturally have to be combined with general treatment, and the best results will only be obtainable at a sanatorium or some health resort. On the other hand, the value of such general treat-

ment is at least doubtful when not combined with proper careful and energetic treatment of the laryngeal affection. The division of the human body into a number of parts, of which each has its own ailment, requiring its own specialist, contradicts the view, which is getting more and more general, that the diseased individual is himself an indivisible entity.

The beneficial effect of tracheotomy in giving rest to the affected larynx has now been confirmed by repeated experience. Though this operation is scarcely ever done for this purpose alone, but as a means of relieving dyspnoea, I have no doubt that many, and by no means only the slightest cases, could be effectually cured by rest alone. The value of such conservative treatment is shown, for instance, in the treatment of tubercular joint affections.

Treatment by the "Schweigecur," *i.e.* keeping completely silent, combined with suitable general treatment, is of the greatest value. The use of the whispering voice should also be prohibited, but unfortunately we cannot fix the vocal cords of our patients—like their legs—in plaster bandages. So much is, however, certain, and in those rare cases which have come under my care where my orders have been explicitly followed I have been able to observe great and lasting improvement. If only this mode of treatment could be carried out more frequently in its full extent! But, as it is, our wise mother, Nature, seems to have made our patients hoarse that they may speak more and with greater effort!

As far as my few observations will allow me to draw conclusions, it seems to me that diffuse inflammatory affections of the larynx, especially when combined with copious pulmonary secretion, are the most appropriate for this mode of treatment, whilst hard non-inflamed infiltrations and tumour-like formations do not seem suitable. These latter affections, as well as those of the cartilages and perichondrium, are thus fitted for the application of a more active local treatment.

I am almost afraid to speak of the local treatment of laryngeal tuberculosis. In every handbook, in numerous monographs and special articles, one comes across such an *embarras de richesse* of remedies, pages full, that at the mention of a "remedy" alone every reader's inclination will be to turn away in terror. I may, therefore, be allowed to mention at once that in the following lines I will speak of only very few remedies, but more explicitly of the *rationale* of local treatment.

Sir Felix Semon<sup>1</sup> said in 1902, with all desirable directness, that the most important part in the local treatment of laryngeal tuberculosis is that it should be efficiently carried out.

I am entirely of the same mind. Superficial cauterisation with the most efficient caustics is scarcely of any use in superficial non-tubercular ulcerations; its value can readily be imagined, then, in tubercular affections, in which the infiltration extends always much deeper than one is led to believe. The curette, or a double curette, may in very rare circumscribed granulations be efficient; it may act sufficiently deep, but in most cases one is unable to remove with it the lateral extensions of the disease, for the *infiltration extends also more widely than one would think*. This knowledge one acquires from a study of the pathology and of microscopic preparations obtained at the *post-mortem* table. Some illustrative examples of these conditions are shown in Table XIX, fig. 3, Table XII, figs. 1 and 2, Table XLII, fig. 4, Table XLIII, fig. 2, of my "Atlas of Diseases of the Larynx." Such conditions—and they are those which occur again and again—destroy all illusions in regard to a policy of pin-pricks. Another circumstance predisposes against the curettage treatment, and that is the extensive, unsurgical, and sinuous lesion of the surface. Again, I fully sympathise with Semon in his admonishment not to cause a superficial lesion of an uninjured surface. But if this highly experienced and renowned author strongly advises to leave matters alone in cases of unbroken surface, I must say that I have followed this principle too for years in the past, but have given it up entirely, since I am in possession of a mode of treatment which is both efficient and harmless.

For some time I had been accustomed to treat tubercular skin infiltrations, unsuitable for extirpation, by deep cauterising punctures, with the best results in regard to permanency of cure as well as cosmetic effect. The idea then occurred to me to apply this mode of treatment also to laryngeal tubercular affections. Since then I have tried it, at first hesitatingly, afterwards more boldly, and now I practise it regularly. The method of procedure (described already two years ago<sup>2</sup>) is very simple: A very finely pointed but stiff galvano-cautery is placed on to the well anaesthetised mucous membrane, it is made incandescent, and pushed deeply into the infiltration. When pushed deep enough, the resistance of the underlying healthy tissue can be felt, or the reflection of the

<sup>1</sup> "Some Thoughts on the Principles of Local Treatment in Local Diseases of the Upper Air Passages," London, 1902.

<sup>2</sup> *Münch. med. Woch.*, 25, 1903.

ncandescent point may be seen in the subcordal space. The burner must be applied until freely movable within the punctured channel, which is usually the case in from 5 to 10 seconds. One may make two punctures at one sitting; to make more at a time is scarcely advisable, on account of the reaction which may follow, especially if the arytenoids or their mucous membrane are affected.

What is the value of this treatment? So far as soft parts are concerned one may say the treatment is most thorough. The infiltrations may go ever so deep—and they always go deeper than one suspects; as long as the cautery point can reach them their destruction may be effected. The effect of the burn through the evolution of heat and the causation of secondary inflammation reaches far beyond the puncture. The effect goes deeply into the tubercular deposits which, though invisible, are almost always present, and is much more reliable than that of a flat burner. The application of the latter has given to several authors—among them Krieg—good results. There is no doubt that the latter method diminishes the danger of auto-infection by causing a firmly covering eschar, but this is surely still more the case with the puncture from the galvano-cautery and the minute lesion thus caused. A further advantage is that the healthy mucous membrane which covers the infiltration remains uninjured, whilst the flat burner causes extensive cicatrices, the contraction of which at a later stage in an organ like the larynx may be of great importance.

Whilst the treatment is very effectual, it is accompanied or followed only by slight reaction; this passes off even in bad cases in from eight to fourteen days, and is often entirely absent. There is no mutilation or loss of function. The same treatment may give relief in advanced and hopeless cases in diminishing irritating cough or pain in deglutition; it therefore finds the limit of its applicability only where endolaryngeal treatment becomes impossible.

Its limits topographically are the subcordal space, and clinically affections of the cartilages and perichondrium. Again, a simple consideration of the fact that the ulcerations and lesions are sure to be much deeper and more extensive than they appear in the laryngoscopic mirror shows the limits for this mode of treatment. The extent of the lesions is usually only recognised at the autopsy, and thus in certain advanced cases it is necessary to make an autopsy in the living subject—*i.e.* a laryngotomy.

I venture to prophesy that this operation, though at present scarcely thought of by many laryngologists, will have a limited but well-defined future in the treatment of these advanced cases of

tubercular affections. I say this though I see the danger of being accused by many of my colleagues of optimism, but I base my opinion, not alone on the extraordinary good results which I have obtained, but also on an exhaustive study of all cases which have come to my knowledge personally or through the records of literature. Of four cases operated on by me which healed without complication, three have been cured and have remained healthy for 14½, 8, and 2 years respectively; only one died of pulmonary hæmorrhage, eight months after the operation. I propose to deal with this subject on another occasion, but I may say here that my studies have shown me the possibility of putting narrowly defined indications for this form of treatment, and thus enabling us to select here and there single cases suitable for this operation.

In conclusion, I will make some remarks in regard to the importance of two frequent complications and their treatment. What are we to do in cases of pregnancy? Pregnancy dominates the course of tuberculosis in so sovereign a manner that every attempt at local treatment may well stand impotently aside. But if the laryngeal affection has arrived at a stage where it interferes with the preservation of the patient's strength or nutrition, be it by causing dyspnœa or dysphagia, then we are naturally obliged to take active measures. The success of galvano-cauteric punctures, even when, in single cases, they should temporarily increase the trouble, is here specially evident.

A second complication of rarer occurrence, but of greater clinical importance, is the syphilitic infection of tubercular patients. Of special interest is the question of treatment in those doubtful cases of tertiary laryngeal disease where the diagnosis has to be made *ex juvantibus*; and where there is a certainty or great probability of tubercular disease elsewhere in the body. Our experience teaches us that syphilitic infection influences the fate of a tubercular patient most unfavourably, and that antiluetic treatment of any severity puts a further strain on the patient's strength. When the administration of iodide of potassium causes a rapid improvement in the local disease there is usually an improvement in the general condition. When such improvement does not take place or only insufficiently, we have to do with tubercular or metasymphilitic affections, which usually also do not react to mercurial treatment. This alone would be a reason to avoid the latter, but in addition also the influence of mercury in a weakened patient makes a tuberculosis hitherto latent become manifest and leads to a rapid and inevitably fatal course. It is therefore to be recom-

mended, if iodide of potassium should fail, that one should resort to local treatment alone. Metasyphilitic processes are very suitable objects for surgical treatment. In cases where there is no doubt and where mercury seems unavoidably indicated, it is advisable to commence with very small doses of this metal or its salts, controlling carefully the body weight and increasing the doses only when the weight increases. The success of the anti-syphilitic treatment is only shown when it increases the patient's weight.

Finally, I should like to emphasise that *the success of local treatment of laryngeal tuberculosis shows itself only partly in the laryngeal mirror ; its principal image must show itself by an improvement of the signs on auscultation and percussion over the thorax and on the scale of the weighing machine !*

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## BRITISH MEDICAL ASSOCIATION.

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### PROCEEDINGS OF THE SECTION OF LARYNGOLOGY, RHINOLOGY, AND OTOLOGY.

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### A DISCUSSION ON THE TREATMENT OF LARYNGEAL TUBERCULOSIS.

*The President of the Section, Dr. F. W. BENNETT, in the Chair.*

DR. JOBSON HORNE (London) and Dr. S. H. HABERSHON (London) introduced the subject for discussion ; their introductory addresses will be found on pages 623 and 630 of this issue.

Dr. STCLAIR THOMSON (London) said : The openers of the debate have admirably outlined the subject and overcome the difficulty of condensing a very wide subject into a limited space. For those who follow them it is impossible in ten or fifteen minutes to do anything like justice to an affection so kaleidoscopic and deceptive, and where the indications for treatment are so numerous and variable.

Progress in the treatment of tuberculous laryngitis has certainly been made since Morell Mackenzie wrote, twenty-five years ago, that " it is not certain that any cases ever recover," and from his own vast experience could only recall four in which he had reason