

and the margins of which are only slightly raised, but somewhat redder than the surrounding parts. There was nothing characteristic about the shape of the ulcers, but the larger ones were more oval in form. There were only two ulcers on the left tonsil. Examination with the laryngoscope revealed a swelling and redness of the free borders of the epiglottis, while the rest of the larynx was normal. I excised a piece of the right tonsil in order to examine it with the microscope. The tissue was infiltrated with round cells, enclosing numerous very large multi-nucleated giant cells. Here and there opaque, cheesy spots were visible, and large numbers of bacilli were found in the necrosed as well as in the tubercular parts, but the giant cells were not specially attacked by them.

When I saw the patient again, six weeks later, the ulcers had increased very much in size, and had become confluent. Fresh tubercular ulcers had also appeared on the uvula and soft palate. At the same time I observed several infiltrations, about the size of a pin's head, on the lingual surface of the epiglottis, which was very much swollen. An examination of the larynx was no longer possible, on account of the great swelling of the arytenoid cartilages, which were partly hidden by the backward inclination of the epiglottis. The patient died of exhaustion shortly after. The treatment consisted in painting the parts with a 10 per cent. solution of cocaine and iodol insufflations. I could not observe any good result, especially as I saw the patient very seldom.

The subject of the second case was a waiter, aged 24, who suffered from advanced tuberculosis of both lungs, with large quantities of bacilli in the sputum. He complained for six weeks previously of pain on swallowing, which radiated into the right ear. An examination of his throat revealed several ulcers on the lower part of the atrophied right tonsil. They were about the size of a lentil, and presented an appearance similar to those of the first patient. The epiglottis, arytenoid cartilages, and aryteno-epiglottidean folds were very much thickened. The space between the arytenoids was ulcerated, and the vocal cords were red and infiltrated. Unfortunately, I could not remove a piece of the tonsil, so I scraped out the ulcers with a curette. There were plenty of bacilli in the scrapings. I then cauterised the ulcers with the galvano-cautery, after which healthy granulations formed and the ulcers healed. Unfortunately, the disease has made such progress in the lungs and larynx that the patient will probably die soon. In the meantime, the ulcers of the tonsil are still healed now, six weeks after the operation. I may add that both patients were perfectly free from syphilis.

It is remarkable that there are no clinical records of isolated tuberculosis of the tonsils, although, as I have said before, pathologists have drawn attention to it. This may be partly due to the fact that this disease has been mistaken for syphilis, from which it could not be distinguished with positive certainty by simple observation alone. But the principal reason is that these tubercular growths seldom break down, an event which could alone render a clinical diagnosis possible. As Strassmann has already pointed out, there is nothing to be seen externally in the diseased tonsils; the most varied conditions are present in the affected parts, such as atrophy, hypertrophy, etc., and it is only when the disease breaks out on the surface that a clinical diagnosis is possible. It is difficult to say why this occurs so rarely. The great development of fibrous tissue in tonsils which are rarely normal, but are usually either atrophied or hypertrophied, may possibly prevent the degeneration of the new growth, as in tubercular tumours of the larynx.

The prognosis is bad, not so much on account of the disease itself (which can be overcome, at least for a time, as in my second case), but rather on account of the pulmonary lesions which accompany it, and the danger of its extending to neighbouring parts.

The treatment must consist, above all, in trying to destroy the diseased parts with the galvano-cautery; and if this is no longer possible, cocaine must be used for the relief of pain. The ulcerated spots may be powdered with iodol, a method which I have found successful in tuberculosis of the larynx.

ACETANILIDE IN EPILEPSY.—M. Faure has used at Bicêtre acetanilide in the treatment of epilepsy without success, although he continued it in five patients for two months and a half.

THE DORPAT UNIVERSITY.—The *Personal der Universität zu Dorpat* states that on February 1st, 1887, the Dorpat University had as many as 1,675 students; of these, 759 belonged to the medical faculty, while there were only 235 jurists and 234 theologians. One thousand and ninety-eight students were natives of the Baltic Provinces. The number of foreigners did not exceed 26.

AROMATIC spirits of ammonia is recommended by Dr. Proegler (*Medical Record*) as a convenient solvent for antifebrin.

REMARKS ON LARYNGEAL PHTHISIS.

Being an Introduction to a Discussion on this Subject in the Subsection of Laryngology at the Annual Meeting of the British Medical Association in Dublin, August, 1887.

By PROSSER JAMES, M.D.,

Lecturer on Materia Medica and Therapeutics at the London Hospital Medical School.

In opening this debate, it seems to me desirable to elicit the opinions of others rather than to restate my own. With this object I propose to put certain questions, and with a few suggestions leave them for members to answer. 1. And, first of all, *What is laryngeal phthisis?* This question may at first seem unnecessary in an assembly of experts, and yet, whether judged by printed statements or living cases, some differences seem to exist, and it is most important to be quite sure as to what each speaker intends to apply his remarks. No doubt definitions enough have been attempted, though it is exceedingly doubtful how far they have assisted the orderly arrangement of our views. When we meet with a certain kind of swelling of the soft tissues, accompanied by other symptoms, our experience tells us that the swelling is likely to lead to ulceration; or when this process has begun and we fear that the cartilages may become involved; or when, at an earlier stage, we encounter facts which warn us that tubercle has probably been deposited in the lungs, we may attribute the laryngeal symptoms to a similar deposit. But all this belongs rather to a history than a definition, and so many varieties of appearance, as well as of interpretation, occur, that the question I have asked may be thought worth attention as an introduction to others. 2. *Is there such a disease as laryngeal phthisis?* Of course we may apply the name to cases in which the stress of the disease falls on the larynx, but the lungs are so constantly involved that the laryngeal affection is often described as merely secondary—a complication of pulmonary phthisis. Some have even gone so far as to deny the possibility of primary laryngeal tuberculosis. Yet they cannot deny the existence of tubercle in other organs without pulmonary deposit. If so, why is the larynx to be exempted from such liability? They scarcely venture to deny that we may sometimes detect laryngeal phthisis before the skilled auscultator can discover pulmonary mischief, but then they assert that sooner or later this will appear. To this statement it might be objected that in such case the pulmonary deposit seemed to be secondary. The history of phthisis might suggest that any serious disease of the larynx would be likely to set up pulmonary disease in a predisposed person. The difficulty of proving the existence of primary laryngeal phthisis lies in the fact that, if it exist, it so constantly leads to pulmonary disease that we cannot expect to find it uncomplicated on the *post-mortem* table, and if we did (through death from accident, for example), there would be room at an early stage for different interpretations of the appearances. This leads to a third question. 3. *What is the relation of bacilli to laryngeal phthisis?* Are we to make the presence of Koch's bacillus the sole criterion of the existence of tubercle? If so, not only is the diagnosis to be settled during life, but to be confirmed after death by this single sign, and to satisfy some of the occurrence of primary laryngeal phthisis it would be necessary to find the bacilli in the larynx, and demonstrate that the lungs were unaffected. 4. *Can cases of laryngeal phthisis recover?* This question again and again crops up, and almost every time it is discussed facts are reported in favour of an affirmative reply. My own views are well known to you. The cases of recovery which I reported to this Association in 1873 were so striking, and so satisfactory on account of the time they were observed afterwards, that I am often asked why they were not recorded in full in the *JOURNAL*. The facts have been widely published elsewhere, and I am not about to weary you with a repetition nor with other cases confirming my own opinion. 5. The foregoing questions lead up to the next. *What is the proper treatment of laryngeal phthisis?* I am not in the habit of describing my recoveries as "cures," but I do attach importance to treatment. While greatly valuing vapours, sprays, and other local measures, I am equally anxious as to the constitutional treatment. We have not merely to deal with a tuberculous larynx; the consumptive patient needs our help. Just now the bacilli enter so largely into professional views, that two points in reference to local measures demand attention—namely (a) the influence and power of antiseptics, (b)

manipulative interference. (a) Twenty-one years ago, when I was physician to the North London Consumption Hospital, a room was fitted up for me for the purpose of keeping patients for any length of time in an atmosphere more or less charged with nascent sulphurous acid gas. Other disinfectants have since taken its place, but the simple method of employing sulphur fumes has again quite lately been resorted to by Dr. Sollaund, who, as reported in the *Gazette des Hôpitaux* (May 26th), employed a phthical sergeant for sixty days in the disinfection of the rooms of the barracks. At first the man suffered from much oppression, and increase of cough and expectoration, with a burning feeling in the throat, etc. But he soon found he could easily tolerate the fumes, and at the end of the time he was greatly improved in every respect, and the number of the bacilli had considerably decreased. In laryngeal phthisis sulphur fumes are often too irritating, and the proportion of gas should be graduated carefully and its use regulated properly. Other disinfectants are often more agreeable, and therefore preferred, but the object of using them is the same, and the bacilli afford some measure of the effect.

(b) Manipulations. In the presence of a wave of surgical enthusiasm which is not deterred from the attempt to eradicate localised disease from the lungs, we must be prepared for some bold proposals for dealing with the larynx. Accordingly, at the Société Médicale des Hôpitaux, it has been recently asserted that M. Ehring has submitted 200 cases of laryngeal phthisis to surgical interference. His method seems to be twofold; to scrape and clean tubercular ulcerations, and to inject lactic acid and iodoform under the mucous membrane. M. Gougenheim said that out of the 200 cases treated by these methods, 28 had been cured. M. Labbé said these statements were so extraordinary that they could not be accepted without reserve. The injection of an acid solution of phosphate of lime into localised tubercular disease has been lately systematically used by Dr. Kolischer. Cures of fungous masses, of enlarged glands and tubercular joint diseases are reported. Professor Albert, who was at first sceptical, has stated to the I. R. Society of Medicine of Vienna that he had been surprised at the results, especially in joint disease. The injections are very painful, and are followed by severe reaction, both local and general. Swelling, induration, breaking down and throwing off of tissues, sometimes the formation of a line of demarcation resembling gangrene, are reported, accompanied by fever. Nevertheless, we hear that Dr. Kolischer is extending the method to laryngeal and pulmonary cases, but no report has at present been published of the results attained. The catastrophes that have sometimes followed interstitial laryngeal injections in other cases may serve as a warning to ambitious operators, and lead them to await the judgment of the Vienna Society of Medicine on this method. So far as the scraping and cleansing of existing ulcers recommended by M. Ehring, it is much less heroic than the deep incisions into swollen tissues advocated by Maurice Schmidt at the Milan Congress, and declared by him to be curative, but which severe treatment does not seem to have commended itself to others. Surgical interference is no novelty. Schmidt's deep incisions in 1880 were but the outcome of scarifications advised many years before but mostly abandoned. Thus Dr. Marcet, in 1868, recommended punctures and scarifications in the swollen and "indurated form" of the disease, although he admitted that "when the laryngeal mucous membrane is extensively infiltrated with tubercular deposit the scarification had better be withheld." His object was to "let out the blood which, collecting and accumulating within the membrane, yields material for the formation of tubercles." Others proposed scarifying in œdematous conditions, the object being different. It seems difficult to admit the propriety of this treatment in a disease the tendency of which is to pass into ulceration. Does not a wound seem likely only to hurry the case into the next stage? A recrudescence of the inclination towards surgical measures may well cause us to weigh our responsibilities; and without any desire to dogmatise, I may be permitted to add that further evidence would be required to induce me to abandon gentler treatment which has already given me some successes. The test to which we should put these surgical proposals is this: If the patient could understand his position, how would he wish to be treated? We should do for our patients what we should wish to be done for ourselves were we in like case.

SUCCESSFUL VACCINATION.—Dr. Muncaster, public vaccinator for the Barton district of the Luton Union, has received a Government grant for first-class vaccination.

RAILWAY EMPLOYÉS AND AMBULANCE INSTRUCTION.—A class of about thirty of the railway employés of the Great Western Railway at Pontypool, who have been attending a class of instruction in self-aid to the wounded, formed by Dr. E. Stanley Wood, of that town, have successfully passed the examination of Surgeon-Major Wood.

THE TREATMENT OF LARYNGEAL PHTHISIS.

Read in the Section of Laryngology at the Annual Meeting of the British Medical Association held at Dublin, August, 1887.

By G. HUNTER MACKENZIE, M.D.,
Lecturer on Practical Laryngology and Rhinology in the School of Medicine,
Edinburgh; Laryngologist to the Eye, Ear, and Throat Hospital; and
to the Western Dispensary, Edinburgh.

It is impossible within the limits of a brief communication to enumerate the remedies which have been advanced for the treatment of laryngeal phthisis, and the advantages which, in the opinion of its discoverer, each is supposed to possess. To anyone who peruses the copious literature of the subject, the diversity of opinion which exists regarding this matter must be tolerably apparent, and such an one must feel inclined to join in the wish of Virchow, that observers would exercise a little more caution before speaking of the healing of tuberculous ulcers of the larynx under the various remedies. It cannot but be satisfactory, however, to note that such an experienced and painstaking observer as our Chairman,¹ who has watched and noted the same cases for prolonged periods, is not inclined to regard the curability of the disease as altogether hopeless.

The treatment of laryngeal phthisis may be medical, surgical, or climatic. It is generally allowed that remedies of a sedative or mildly astringent nature are to be preferred to caustics. Of these, morphine, iodoform, papayotin ($\frac{1}{2}$ to 5 per cent. solution), and cocaine, with its substitutes, caffeine and menthol, are the best. The local application or submucous injection of lactic acid has lately received a considerable degree of attention, especially on the Continent, from the statement of Mosetig-Moorhofs, that in lupus this acid destroys the unhealthy tissue, and leaves the healthy untouched. Krause² has very fully described its (supposed) mode of action and method of application. He commences with a 10 per cent. solution, and increases when necessary to 80 per cent. He says the applications cause the previously red and swollen parts to become pale and free from swelling, and the ulcers to be covered with a firm crust or scale, after the removal of which healthy granulations appear, followed by diminution and cicatrization of the sores. Amongst others who report favourable results of lactic acid are Gleitsmann,³ who says he has had good results in ulceration, and that the acid has no effect upon intact mucous membrane; and Jellinek,⁴ who narrates a case of tracheotomy for tubercular stenosis, in which, in twenty days, the larynx was rendered so permeable by local applications of the acid, that the cannula could be dispensed with. Along with my colleague, Mr. Maxwell Ross, I have lately had the opportunity at the Eye, Ear, and Throat Hospital of Edinburgh, of watching a similar case. The patient was tracheotomized on the 6th April of this year on account of laryngeal stenosis from tubercular infiltration and swelling. Almost daily applications of lactic acid have now been made for three months, and still the cannula cannot be dispensed with. The disease has not made progress during this period, but I am inclined to attribute this more to the beneficial effects of the operation than to the application of the acid. Lactic acid has been unfavourably reported on by Schnitzler,⁵ Massei,⁶ and others. My own observations, which, I may add, have not extended to the submucous injection method, have not hitherto been of a very hopeful nature.

The local application by sprays, inhalations, or insufflations, of antiseptics such as iodoform, corrosive sublimate, and carbolic acid, merits some consideration. I have paid a considerable degree of attention to the actions of these, with special reference not only to their local healing effect, but also to their influence upon the germ of the disease, and in no single instance have I been able to convince myself that they specifically affect the local lesions, and they certainly have not the slightest effect upon the bacilli of tubercle even when used in tolerably concentrated media and for prolonged periods. Time forbids a detailed statement of my cases, some of which have been already recorded.⁷

It appears to be the case that the amenability of tubercular lesions to treatment is in direct proportion to their accessibility; that there

¹ *Medical Times*, 20th June, 1885.

² *Berlin. Klinische Wochenschrift*, Nos. 29 and 45, 1885.

³ *New York Medical Record*, 16th June, 1886.

⁴ *Wiener Med. Prof. Colleg. Sitzung*, 9th Nov., 1885.

⁵ *Ibid.*

⁶ *Journal of Laryngology and Rhinology*, May, 1887.

⁷ *JOURNAL*, vol. ii, 1884, pp. 711 and 1132; *Lancet*, vol. i, 1885, p. 187; *Practical Treatise on the Sputum*, 1886, p. 87.