SOCIETIES' PROCEEDINGS.

BRITISH MEDICAL ASSOCIATION.

Meeting at Aberdeen, July, 1914.

DR. H. LAMBERT LACK, *President, in the Chair.*

Abstract Report by MR. HAROLD WHALE.

President's Opening Address.

With regard to the work before us, the two subjects chosen for discussion will both, I believe, prove of great interest and, I trust, mark a decided advance in our progress. In both cases we are discussing affections, the treatment of which has hitherto been considered hopeless. The very fact that a subject has again come up for discussion indicates that some progress has been made, and I trust that after the meeting we shall take a more hopeful view of both affections. It is quite certain that our opinions as to the absolutely hopeless nature of inoperable neoplasms of the throat has undergone a marked change in recent years. We may not be able to cure them, but we can certainly do a great deal more than we have ever been able to do in the past.

The record of the past year has been one of marvellous progress in our branch. Three things appear to stand forth. They may have been invented before, some of us have been acquainted with and used them before, but I think it is only in the past year that they have been generally recognised and adopted.

Suspension laryngoscopy, which we owe to the genius of Killian, practically dates from the International Medical Congress of last year. It makes a tremendous advance on bronchoscopy, especially in the extraordinary facilities it allows for operation.

Diathermy, introduced by Nagelschmidt, of Berlin, and first used in this country by Douglas Harmer, is certainly more than a year old, but its value is still not so widely known as it should be. It is employed in few hospitals and by few specialists. I regard it as the most valuable means we have for dealing with many conditions. I have found it invaluable in cases of inoperable nævi in the throat and mouth, invaluable in a few intractable cases of lupus of the upper air-passages, and if any of you should meet with one of those most difficult cases of nose-bleeding due to multiple hereditary telangiectasis, I would strongly recommend you to try it. In my hands it has proved the only means of dealing with such a case where the cautery had entirely failed.

Finally, I would like to mention the intra-tracheal administration of ether as one of the greatest helps in our work. It enables us to perform severe and bloody operations upon the upper air-passages with a feeling of complete security. It may be used for all operations on the nose, upper jaw, mouth and pharynx where serious bleeding is expected, and will, I think, completely supercede the need for laryngotomy as a preliminary to these preceedings. One may regret that none of these great advances has come through the work of our own fellow-countrymen. We must hope they will not be far behind and that something will shortly materialise from the good work which we know is being done. There is, for instance, Freeman's work of hay fever which bids fair to provide us at last with a rational and successful method of treatment for

https://doi.org/10.1017/S1755146300014475 Published online by Cambridge University Press

that serious distressing disease, although we have been so often disappointed by previous efforts in this direction that one hesitates to accept anything not confirmed by prolonged experience.

Discussion on Treatment of Inoperable Growths of the Nose and Throat.[1]

Dr. Watson Williams (Bristol) had come to the conclusion that for sarcomas radium in suitable dosage often effected exceedingly good results, while in epitheliomas of the mucous tract the results, though temporarily encouraging, generally ended in recurrence and death. That sarcoma was often successfully removed by the knife was, of course, undoubted. Nevertheless it was frequently impossible to determine how deep a growth had penetrated, and he felt that patients should sometimes first have the benefit of radium or diathermy in *suitable* cases. He instanced one of his cases in whom operation on a sarcoma of the tonsils which had extended into the neck was followed by recurrence. This was treated by two applications of 200 mgrm. of radium by Dr. Finzi, and now, two years later, he found the patient remained quite cured. Finally we could not fail to realise that even if in malignant growths in the œsophagus recurrence was inevitable, the relief to the patient and prolongation of life in such inoperable conditions was a sufficient reason to resort to radium or X-rays in these cases.

Mr. Somerville Hastings (London) gave his experiences of the action of radium in sixteen cases, namely, five sarcoma and eleven epithelioma. Of the former, two were apparently cured, two temporarily improved, and one was unaffected. Of the epithelioma cases, four were temporarily improved, and seven were unaffected. The regions involved included pharynx, naso-pharynx, tonsil, œsophagus, and cervical region (glands). The silver tubes he used were 0·3 to 0·8 mm. thick; the dosage 50 to 200 mgrm. of radium bromide. The duration of the exposure was from four to twenty-four hours. Stress was laid upon the necessity of avoiding excessive exposure, and one case was described in which too prolonged an exposure had led to serious sloughing. In this case the patient had septic teeth, and this factor might also have played a part in inducing the complication. In œsophageal growths the radium tube could be fixed in a Symonds' tube.

Dr. Pegler narrated a case of a female patient, aged fifty-nine, who had consulted him for a growth in the region of the lingual tonsil. The glands in the neck, on both sides, were greatly swollen; there was also an enlarged gland in the right axilla. When screened by Dr. Finzi, a dark shadow was seen in the posterior mediastinum, indicating a mass of glands in that situation. The right half of the diaphragm was paralysed. The case was treated by insertion of a tube of pure radium bromide into the tongue, and afterwards by a weekly application of X-rays. The result so far, after a period of about four months, is extremely satisfactory in regard to swallowing, speech, and general condition, and especially so is the disappearance of the tumour and of thrombosis of the right lower limb, which intervened some time after the radium operation, and which opens up an interesting question as to its immediate cause.

Dr. W. S. Syme said he thought the most important pronouncement in the discussion was that made by Dr. Hill, that the time has come when, in cases of operable malignant disease of the nose and throat, we may use our discretion as to whether we shall treat the case by surgical methods

[1] For introductory papers see Journ. of Laryngol., Rhinol., and Otol., October, 1914, p. 481, *et seq.*

https://doi.org/10.1017/S1755146300014475 Published online by Cambridge University Press

or by radium. Early cases of sarcoma of the nose are particularly hopeful as regards surgical treatment, and it would seem inadvisable to do anything to allay removal by ordinary surgical measures. In sarcoma of the tonsil, again, it is sometimes possible to remove an early growth by simple enucleation. In regard to epithelial growths the action of radium has been shown to be so unreliable that the argument in favour of surgical measures is stronger. The time, therefore, does not appear to have arrived when it should go forth that there is any method but surgery for dealing with early malignant growths.

Dr. T. H. Livingstone (Newcastle) quoted a case of sarcoma of the maxillary antrum which he had treated with radium. The primary growth disappeared and a sinus which was present healed up. The patient died six months later of malignant disease of the liver.

Mr. T. Jefferson Faulder said the effects of diathermy in these cases are often very striking as regards the freedom from pain, the abolition of fœtor, the absence of febrile reaction and sometimes delayed growth or even apparent healing. Those who have time and opportunity ought to make experiments on the recent cadaver, and microscopical examination of the tissues, as was done in the case of rodent ulcer when that disease began to be treated by X-rays. At the same time it would be a great misfortune if we allow the idea to get abroad that we can deal effectively with cancerous growths at a late stage. As things are it is very rare to see a case of cancer of the throat at what might be properly called an early stage. To attach the word inoperable to diathermy, which is a very fine kind of cautery, or to radium, about which we know very little, is, in the present state of human nature, to encourage the sufferers from cancer to procrastinate even more than they do already. Cancer of the hypo-pharynx is accessible by means of suspension laryngoscopy, and if we could get such cases at an early stage we have an ideal means of treating them in diathermy. For if its effects are so striking in the inoperable cases it must be capable of curing early cases in a more easy and safe manner than the knife, but if we use the word inoperable too freely these early cases will be conspicuous by their absence. He asked whether in cases where glands in the neck are dissected out after diathermy there was any difficulty of a special nature.

Mr. John F. O'Malley was indebted to Mr. Somerville Hastings for the opportunity of working with him and following the progress of his cases. All the sarcomata treated did well, but carcinomata only moderately so. The latter in many instances underwent softening, especially around the margin of the growth which tended to lose its hardness and diminished in size. The possible explanation is, that the connective tissue round-celled barrier, which is set up against the invading epithelial cells and which is a large factor in the hardness of the growth, attributed to infiltration of the healthy tissues, disappears before the therapeutic action of the radium. The following are the principal points which seemed to recommend the extended use of diathermy in these cases: The facility of removal of growth of any size; the facility of their removal in parts inaccessible to ordinary surgery; the freedom from hæmorrhage—hæmorrhage during removal with the knife is usually severe and difficult to control, and patients of this type bear the loss of blood badly; the wounds in mucous surfaces appear to heal well with little scarring.

The President said that during the past year he had treated sixteen cases of malignant disease of the throat, which had entailed over thirty applications of diathermy. His results were as follows: Four cases of carcinoma of the soft palate and adjoining regions, all extensive and

https://doi.org/10.1017/S1755146300014475 Published online by Cambridge University Press

inoperable. They now appear locally free from growth although one of the worst cases was treated last August. In every case the diathermy caused swelling of the neck and glandular region, and subsequent removal of the glands was very difficult, in one it proved impossible. Probably in these cases there will be recurrence. Three cases of carcinoma of the palate, which was surgically operable, results all good. In two there was swelling in the glandular region of the neck after the diathermy. One endothelioma of post-nasal space recurred rapidly after two applications, and one carcinoma of the nose was not improved by four applications. One case of post-cricoid carcinoma covering the whole back of the cricoid ring and both arytænoids was done by the aid of suspension laryngoscopy and did remarkably well. There was no immediate ill-effects, and when suspended a month later only scar tissue could be seen. Two similar very extensive cases of carcinoma of the lower pharynx were very little benefited. Three cases of carcinoma of tongue and floor of mouth showed decided improvement, and one is probably free from growth. In two subsequent removal of glands proved very difficult; in one the glands were removed first. One inoperable epithelioma of epiglottis and adjacent ary-epiglottic fold and base of tongue did extremely well. Glandular removal soon afterwards proved remarkably difficult owing to dense fibrous infiltration of neck. Result good so far after seven months, although glands on other side of neck had to be subsequently removed. My experience would lead me to these conclusions: (1) That operations on the throat by diathermy were almost free from risk even in very extensive growths wherever situated and in very unfavourable subjects. The subsequent freedom from fever and pain are extraordinary. (2) That growths too extensive to be removed surgically may be treated with improvement and, rarely, perhaps cured. (3) That extensive diathermy operations may render subsequent removal of glands extremely difficult. It might possibly be better in some cases to remove the glands first. (4) That cases with growths in the throat, locally operable, but where, for any general cause, removal by cutting is inadvisable, diathermy offers excellent prospects of cure. I would even suggest that owing to its ease and simplicity, and the thoroughness this allows, with its freedom from risk, it was the best method of dealing with carcinoma of the throat in all cases. Also it is certain that the effects of diathermy extend much deeper than the immediate sloughing, that the underlying tissues extending right down to the glands are visibly affected, become swollen, infiltrated and subsequently fibrous and scarred. May we not hope that outlying cancer cells in these regions may be destroyed. Clinical experience, X-rays, and radium all show us that these cells are more vulnerable than those of healthy tissues. Radium has acted extremely well in three cases of post-nasal sarcoma and one nasal carcinoma. Both radium and X-rays have failed in every case of carcinoma of the throat.

Dr. Wm. Hill, in reply, said he had quite expected that he would be severely handled for his pronouncement that he not only agreed with those who hesitated to accept the rigid rule that all malignant tumours should be submitted to an immediate cutting operation, provided the growth was within the limits of operability (in the sense that a thorough radical extirpation could be carried out), but went further and definitely laid it down that in some growths which are operable, *e.g.*, sarcoma, not only was it permissible to try methods other than the knife first, but that the method of choice should be the application of radium before even thinking of surgery in sarcomas. Dr. Syme was alarmed lest the public should be

https://doi.org/10.1017/S1755146300014475 Published online by Cambridge University Press

lulled to false security, and to refuse operation in the first instance, that thus valuable time would be lost, and a more extensive operation would eventually be required. It was necessary again to emphasise the point that sarcomas, if they do react to radium (as is usually the case), react almost at once, so that there is no delay of any moment. As regards carcinomas, in advocating diathermy, as permissible in the first instance, in radically removable growths, as well as in those incapable of being completely extirpated, he was in agreement with Mr. Harmer, but it was incorrect to say we were advocating non-surgical measures, for electro-diathermic coagulation of the primary growth in the throat was a surgical measure pure and simple, as the electrode accomplished surgical eradication instead of the knife, but with less chance of lymphatic dissemination and of transplantation, and with more rapid healing of the wound. When there were invaded glands the practice hitherto had been to resort to the knife for dealing with them, but he agreed with Mr. Faulder that there might perhaps be an advantage in combining the knife with diathermy in dealing even with the secondary masses in the neck. Whilst radium might be used in combination with diathermy in carcinomas in the throat, in the gullet we had hitherto practically been restricted to radium in all forms of malignant disease. The President had mentioned the unfortunate occurrence of fibrous contraction following diathermy in the post-cricoidal pharynx, but the same thing was liable to follow, not only radium, but the use of the knife, and was a complication which could often be dealt with by timely intubation. He (Dr. Hill) found that unless a style was used to fix the radium apparatus in the gullet, the radium tube might shift, as had happened in one of his cases from post-anæsthetic vomiting. He therefore did not recommend the use of radium in a Symonds' funnel.

Mr. HARMER replied. His advice was to perform diathermy whenever possible for primary malignant growths; in other words, to operate on the case and so remove as much of the disease as possible. If this advice is followed there will be a great many more operable cases. Later on radium or X-rays can be employed to check the recurrence. As regards operable malignant disease, it is possible that diathermy will prove at least as valuable as the knife. The importance of asepsis cannot be overstated. In answer to Dr. Watson Williams, he believed that any vessel can be coagulated, whatever its size, but the danger of secondary hæmorrhage when the sloughs separate must always be considered. He did not think that the glands were more difficult to remove after treatment by diathermy unless there had been inflammation of the neck.

Discussion on Otosclerosis.

For introductory papers see p. 513 *et seq.* of this issue.

Dr. MACKENZIE BOOTH read a communication by Dr. A. Maurice, of Paris, on "Diathermy with Auditory Re-education." He described an apparatus for the transmission of heat to the depths of the ear—and claimed that the combination of the diathermy with the use of the kinésiphone gave better results than by the latter method alone. Dr. Booth had used Dr. Maurice's kinésiphone for five months with manifest improvement in hearing as well as in the relief of a tinnitus and other discomforts attending the deafness. He regretted that such short time had elapsed so that no definite statement as to permanence could be made. He submitted graphs of three cases in which considerable improvement in the hearing power was indicated by an ascending curve.

Dr. WATSON WILLIAMS felt particularly interested in the slides

https://doi.org/10.1017/S1755146300014475 Published online by Cambridge University Press

shown by Dr. Fraser which lend support to the view that otosclerotic lesions might be infective in pathogeny. So much pointed towards a local infective influence determining the changes associated with otosclerosis. He felt that the absence of gross catarrhal conditions did not suffice to exclude catarrhal infection as a determining cause. One finds that frequently optic neuritis or atrophy is determined by posterior ethmoidal cell or sphenoidal sinusitis which is quite latent in that it was not associated with pus-formation. But it was probably just these cases where polynuclears were absent that toxic influences played a more potent influence, and so too, perhaps, we had analogous processes occurring in the ear, and these might, to some extent, explain an absence of gross evidence of middle-ear catarrh in otosclerosis.

Dr. WILLIAM HILL remarked that in spite of the laborious pathological and clinical observations carried out by those who had so ably opened this discussion no marked positive advance appeared to have been made either in our conception of the essential nature of this obscure disease or of its relief. Mr. Muecke had rendered a great service, not only to the profession, but also to that section of the general public who were not obsessed with a leaning towards quackery.

Dr. W. S. SYME had never seen clinically anything to make him look upon otosclerosis as an inflammatory process. He asked Dr. Fraser what was the proportion of cases of otosclerosis to all other cases of ear disease seen at the Edinburgh Royal Infirmary. He would also like to know the proportion of cases to the general population, and whether people of the better class are more frequently affected than those of the lower. Moreover, in his experience it is unusual to find otosclerosis pure and simple and unaccompanied by adhesions and catarrhal changes in the membrane and middle ear, not that he considered this anything but an accidental association. In regard to treatment one feels that surgery alone holds out any hope. The difficulty in the past in making an opening in the horizontal canal has been that this has quickly become closed. It has appeared to him that this might be prevented by implanting a strip of periosteum into the opening.

Dr. JOHN W. MACKENZIE (Inverness) referred to Mr. Muecke's paper on "Auditory Re-education," and mentioned one of his cases of nerve deafness with a certain amount of Eustachian catarrh, treated by Mr. Cathcart, London. Improvement for about three months resulted and then relapse in spite of constant use by a miniature kinésiphone.

Mr. JENKINS agreed with Dr. Gray as to the ætiology of otosclerosis. Though he admitted the possibility of inflammatory processes playing a part in causation of otosclerosis, yet he saw no evidence of this either clinically or pathologically. He would like again to draw attention to the evidence of there being changes in the labyrinthine fluid in this condition. The giant-cells he had described at a meeting of the Otological Section of the Royal Society of Medicine early this year were very large cells with definite outline and with many smaller irregularly arranged. These cells differed from all other giant-cells he had seen in any other pathological condition. (Mr. Jenkins exhibited specimens of these giant-cells under the microscope.) He thanked Dr. Fraser for his introductory paper and was very pleased he had mentioned tuning-fork tests once again. At the International Congress, 1913, Mr. Jenkins had drawn attention to the difference between the Rinne test in otosclerosis and middle-ear deafness. His further observations had convinced him that these observations were correct, and that in the majority of cases the Rinne test was negative with much higher forms in otosclerosis than

https://doi.org/10.1017/S1755146300014475 Published online by Cambridge University Press

with obstructive deafness with similar degree of deafness. In many cases he found a negative Rinne in otosclerosis with the highest forks of Edelmann series, even when the hearing of conversational voice was good at 24 feet. He regarded the raising of the low-tone limit as a sign of obstructive deafness element appearing. The internal-ear deafness was a variable element. He would like to object to describing a certain progressive internal-ear deafness as otosclerosis. These cases of almost pure internal-ear deafness clinically behaved certainly very like otosclerosis in many ways, but he would like pathological evidence before classifying them as otosclerosis as is being done on the continent. He would rather that such cases be described as progressive internal-ear deafness in the meantime.

Discussion on Dr. Watson Williams' Paper (Intra-nasal Operative Treatment of Frontal Sinus Suppuration).[1]

Dr. WILLIAM HILL showed Good's bone file or rasp for enlarging the frontal ostium by the per-nasal route. Two of its four sides were serrated and two were smooth; these two adjacent smooth surfaces prevented fracture of the lacrymal bone externally and of the dangerous area posteriorly. He suggested that the term "bougie" was hardly an appropriate one for Dr. Watson Williams' metal sounds. He had recently employed the largest size after a per-nasal enlargement of the infundibulum with ease and benefit.

Sir W. MILLIGAN said that in the hands of Dr. Watson Williams the method of intra-nasal operation was no doubt an excellent and satisfactory one, but in the hands of those less expert he had his doubts as to whether it was as safe a procedure as the external operation, even allowing for its well known dangers. He would be interested to hear what were the relative results of intra-nasal and extra-nasal surgery upon the frontal sinuses in his hands, also if after intra-nasal operations there were many recurrences. From the fact that by the intra-nasal route the frontal sinuses were not obliterated he would be inclined to think that recurrences must of necessity be fairly numerous.

PROCEEDINGS OF THE SCOTTISH OTOLOGICAL AND LARYNGOLOGICAL SOCIETY.

Meeting in the Western Infirmary, Glasgow, June 6, 1914.

DR. WALKER DOWNIE *in the Chair.*

(*Continued from p.* 475.)

Two cases of Plaut-Vincent Infection of External and Middle Ear.—James Adam.—(1) Boy, aged six; seen January 6, 1914. History prior to July, 1913, cannot be obtained. Both ears must have been suppurating before that date, and have been continuously since. On both sides a foul blood-stained discharge, with erosion of meatus and adjacent parts of concha; the external canals plugged with bleeding granulations; the parts very tender. One small gland felt behind left

[1] See JOURN. OF LARYNGOL., RHINOL. AND OTOL., May, 1914, p. 225.

https://doi.org/10.1017/S1755146300014475 Published online by Cambridge University Press