SOCIETIES' PROCEEDINGS

ROYAL SOCIETY OF MEDICINE—SECTION OF LARYNGOLOGY.

President—Dr A. Logan Turner.

December 5, 1924.

An Instrument for the Application of Diathermy to the Œsophagus—A. J. Wright, F.R.C.S.—The electrodes, of various sizes, are designed to be used in conjunction with Jackson's œsophageal bougies, which they resemble in length and diameter. The method of use is first to pass the largest size of bougie possible into the stricture, and then, having replaced this with an electrode of the same size, to switch on the current for as long as is considered safe in the particular case.

Dr W. Hill reported a case in which the deep pharynx was involved, also the cervical, œsophageal and the supraclavicular parts. On the fifth day there was found to be hydro-pneumothorax. The patient also had pericarditis, and died on the seventh day. In that case diathermy resulted in perforation into the apex of the pleural cavity. He (Dr Hill) said that very few people knew how much they were doing with diathermy; the electrode might easily pass beyond the limits of the growth; or at a particular spot there might be thinning, due to fungation and breaking down. The penetration of radium, on the other hand, was known to be weak at a centimetre distance, and there was less risk of penetration which might cause perforation.

Mr W. M. Mollison said he had done diathermy in a few cases of carcinoma of the œsophagus, and he had used the needle at the end of a bicycle spoke, covered with a rubber tube to prevent sparking on the side of the œsophagoscope, as suggested by Dr Iredell. He did not think much harm was done if the needle was put into that part of the growth projecting into the lumen of the œsophagus. In one case relief persisted for six months; the man came to have a second treatment, but he was not so much relieved as after the first. Diathermy relieved the dysphagia to a considerable extent for a time.

Dr Dan M'Kenzie said he had tried diathermy in post-cricoid cancer by means of a long terminal. One of his cases benefited for a time, but in two others abscesses formed at the root of the neck and discharged externally. He had not ventured to apply diathermy to the intrathoracic œsophagus, as it was manifestly impossible to see and to gauge the depth of penetration in the œsophageal wall. If septic cellulitis were to follow, a fatality would result.

Sir William Milligan said there was a considerable future for diathermy in the treatment of œsophageal carcinoma. He had his

https://doi.org/10.1017/S0022215100027171 Published online by Cambridge University Press

electrode mounted on a handle at an angle, so that when it was passed down the tube nothing blocked the view. He asked whether any members had experienced complete stenosis of the œsophagus after diathermy. These cases might be treated under the guidance of the fluorescent screen. He had now under treatment an old gentleman with carcinoma, who had gastrostomy done nine months ago. The speaker diathermised him almost immediately afterwards, and the result was to convert the carcinoma into a fibroid mass, with a resulting complete œsophageal obstruction.

Mr WRIGHT (in reply) said that one felt justified in using the method in the effort to ease some of the trouble these patients endured. With regard to the time the relief lasted, he said that last April he diathermised a case in which there was inability to swallow solids. The patient had some months of relief following the treatment. On re-application, the relief was not so long or so marked. He (Mr Wright) finished by putting in Souttar's spiral metal tube, and that was still in place. The point of importance and the whole difficulty consisted in being sure that one was applying the diathermy to the stricture only.

Early Lupus of the Palate, treated by Diathermy—DAN M'KENZIE, M.D.—Male, aged 29. A circular patch was discovered on the palate a year ago. A small piece removed in June raised suspicion of malignancy. Large and deep removal with the diathermy knife was undertaken in July. Tissue showed lupus. Following the deep excision a perforation appeared in the palate, bone was exposed and destroyed. Cicatrisation proceeded smoothly; perforation healed.

Laryngeal Syncope in a Patient with Carcinoma of the Larynx—Sir JAMES DUNDAS-GRANT, K.B.E., M.D.—Male, aged 57, had carcinoma of left half of larynx, overhanging the entrance with extensive glandular involvement. On two occasions when beginning to cough he fell down momentarily unconscious and sustained injuries to the face. One attack occurred quite recently, the other four weeks previously; he had arterio-sclerosis.

Mr. W. M. MOLLISON asked whether members had seen paralysis of the soft palate and one side of the tongue in association with massive glands in the neck, as in this case. In his experience it was very rare.

Sir JAMES DUNDAS-GRANT (in reply) said there might be a lesion involving the two nerves to those parts. The patient began to cough, and then found he had fallen down on two occasions and struck his head. The syncope was not due to the sucking in of a portion of the cancer. In his other cases with this symptom there was arterio-sclerosis, but in this there was said to be no evidence of that condition, except some rise of blood-pressure. Still, there was obvious goutiness, and his impression was that in these cases the vessels of the brain did not adapt themselves as in the normal person, and hence it was much easier to produce the sudden anæmia of the brain which occurred when inspiration (with expansion of the thorax) was carried out with a closed larynx.

https://doi.org/10.1017/S0022215100027171 Published online by Cambridge University Press

Societies' Proceedings

Case illustrating the Advantage of Tracheotomy as a Curative Measure for Tuberculosis of the Larynx, in a medical man, aged 70—Sir ST CLAIR THOMSON, M.D., F.R.C.S., and WALTER HOWARTH, M.S.—J. R. L., in the spring of 1922, had discomfort in throat, woolliness and change in voice; in 1899, a digital chancre; two years' mercurial treatment; Wassermann negative. Recent course of iodide and several treatments with salvarsan had not relieved him and he was apprehensive of malignant disease.

Vocal cords clear; a pale, almost uniform infiltration of the epiglottis, arytenoids and aryepiglottic fold was noticed. With general care (avoidance of tobacco, care of teeth, further inunctions) he gained weight, but disease in larynx increased. Six months later the epiglottis was so infiltrated and overhanging that it resembled typical "turban-shape;" discomfort in swallowing; no evidence of pulmonary tuberculosis; anti-luetic treatment abandoned.

A year after first observation he had stridor on talking. Glottis narrowed by flabby, lupoid infiltration which had changed epiglottis and aryepiglottic folds into sausage-like swellings, partly concealing cords. On the centre of left ventricular band there was whitish, indolent ulceration. General health good despite limited activity entailed by laryngeal stenosis; diagnosis, lupoid tuberculosis. 11th June 1923, low tracheotomy under local anæsthesia (W. H.). The prompt result was striking. Within a month voice improved, with good glottic space, but the conditions, though subsiding, were as recorded. Six months later 14 lb. heavier than when first seen; had resumed golf; no dysphagia; voice nearly clear. Tracheotomy tube abandoned on 15th April 1924, after wearing for ten months.

To-day voice good, respiration free, epiglottis returned to well-defined outline, but trifle of fibroid thickening on left side. Cords are white, broad, clean. A little general thickening of both arytenoids and aryepiglottic folds—doubtless fibroid. He smokes, plays golf, enjoys excellent health.

Dr JOBSON HORNE said he took exception to the entitlement, "Case illustrating the Advantage of Tracheotomy as a Curative Measure for Tuberculosis of the Larynx," on the ground that there was no evidence of tuberculosis. Given an error in diagnosis, it was possible, he said, to cure anything. The larynx did not present any clinical appearance on examination of past tuberculosis that had healed. Sir St Clair Thomson himself had regarded the appearances before tracheotomy as "typical of lupoid tuberculosis." The use of the term was evidence of uncertainty and it shook the diagnosis of tuberculosis. Moreover, the notes stated no evidence of pulmonary tuberculosis could be found. With the disease in the larynx so extensive as had been described, if it had been due to tuberculosis one would have expected to have found some evidence of the disease in the lungs. On the other hand, there was a definite history of syphilis. Dr Horne said he had no intention of opening up a discussion on the

https://doi.org/10.1017/S0022215100027171 Published online by Cambridge University Press

relationship of lupus to syphilis and tuberculosis, but he would remind them that in lupus there was a tendency through atrophy and otherwise for the larynx to recover itself apart from treatment; moreover, in syphilis as well as in lupus, tracheotomy, by placing the larynx at rest, helped to bring about a cure by Nature.

For the reasons stated, he considered the claim for tracheotomy as a curative measure for tuberculosis of the larynx had not been made out. He was prepared to say that in quite a small number of cases of tuberculosis of the larynx tracheotomy might be necessary to overcome obstruction and stenosis, but not as a curative measure. Speaking generally, in typical tuberculosis of the larynx, in which syphilis was not a factor, once the tracheotomy tube was inserted, the end was not far distant.

Sir JAMES DUNDAS-GRANT asked what was the degree of stridor in the case. If there was stridor during phonation, there was probably some obstruction below the vocal cords, and he thought that a strong indication for tracheotomy; probably members who saw the condition would have done it at once. Obviously the lungs were not affected to any considerable degree. The result, he considered, was brilliant.

As Dr Jobson Horne had said, there was the question of diagnosis. and he (the speaker) did not think members were in a position to judge now as to whether the infiltration was tuberculous or syphilitic. He had seen cases of lupus of the larynx tracheotomised with great advantage, the patients living many years afterwards. He had been obliged to do tracheotomy in a case of tuberculosis of the larynx, in which the vocal cords were fixed in such a position that there was inspiratory stridor, Soon after the operation the cords became mobile, but there was extensive disease of the lung, and the man ultimately died of asphyxia.

Sir WILLIAM MILLIGAN congratulated both the patient and his surgeons on the result. But was the condition tuberculosis? Was it not possibly a para-syphilitic condition? There was the history of infection of the finger with lues, and a negative Wassermann did not prove it was not specific.

The profession had been educated in too slavish a manner in the idea that tracheotomy should not be done for tuberculosis; he believed that to be a mistake; there were cases in which it was required, not only to relieve obstruction, but to secure physiological rest to the larynx. Dr Jobson Horne said that if tracheotomy was carried out in a tuberculous patient, he seldom lived long afterwards, but he (the speaker) recalled a bad case of tuberculosis of the larynx in which the patient lived nine years after tracheotomy. The late Dr Dreschfeld said that the nearer tuberculosis was to the surface of the body, the more dangerous it was. The man to whom he was referring had very limited tuberculosis at the base of one lung but his larynx was severely involved and the introduction of a tracheotomy tube gave great relief. The tube was removed a year later, and the patient lived eight more years. He had never since then worked slavishly on the idea that tracheotomy was to be avoided in tuberculosis of the larynx. The point deserved to be fully ventilated. He admitted the operation was most inadvisable when there was very active disease in the lung, as it acted as an irritant, and the coughing and discomfort were much increased.

https://doi.org/10.1017/S0022215100027171 Published online by Cambridge University Press

Mr J. R. L. (the patient) said he felt convinced that if tracheotomy had not been done he would not now have been alive. The stridor from which he suffered was very severe. Three or four days after it was done he ate well, and had no dysphagia or stridor. He was instructed in regard to certain matters, and he carried them out. Silence was hard to observe, but he communicated his wishes and thoughts only in writing, even when playing golf, which he did twice a week. He had his thumb infected in practice twenty-four years ago, and he was under Sir Jonathan Hutchinson and Mr Jacobson. All he had was a hard sore and an enlarged supracondylar gland, and a sore throat. He took mercury for two and a half years, and Colonel Harrison gave him injections. He was an old athlete, and led a very healthy life.

Sir ST CLAIR THOMSON (in reply) said he was not recommending this procedure as a panacea. In his experience, tracheotomy was only indicated in about one case out of 200 of laryngeal tuberculosis. If it seemed suitable in certain cases, its advisability should be carefully considered. On the left ventricular band there was a grey ulcer, and a shallow ulcer on the laryngeal surface of the left aryepiglottic fold. Clinically, the appearances were almost typical of tubercle. Tubercle was of all degrees, from lupus to so-called "galloping consumption": some patients were dead in three weeks, others who had had tuberculosis of the larynx had lived twelve and fifteen years.

The present case was brought forward because of the case Sir James Dundas-Grant showed at the last meeting, which the speaker regarded as tubercle.* He (Sir St Clair) said there was stridor, but there were no physical signs in the lung, no temperature, nor bacilli in the sputum. He strongly recommended a trial of tracheotomy in that case. The stridor on talking to which he (Sir St Clair) referred was that which occurred when there was a little extra exertion. Stridor on talking was an indication for tracheotomy, as also was stridor occurring in sleep.

There still existed the old prejudice against tracheotomy *quâ* tracheotomy. He agreed there was very little call for it in tubercle. It was recommended forty years ago by Moritz Schmidt, before sanatoria were established, and before the silence treatment. Now, silence produced nearly all that was formerly achieved by other means. But when there was stridor, tracheotomy should be done.

Microscopical Section of Laryngeal Tumour, from a young child—HERBERT TILLEY, F.R.C.S.—Boy, aged 3, has had crowing inspiration at night for two to three months and during the day for a fortnight; no distress on exertion. On 29th October indirect endoscopy showed a pendulous growth on the upper and inner aspect of the right arytenoid; removed by Paterson's forceps. Immediate disappearance of symptoms took place.

Translucent in consistence it resembled a small nasal polypus.

Dr H. G. BUTTERFIELD reported that the material received for examination consisted of two portions of tissue, the larger of which measured

* *Journal of Laryngology and Otology*, vol. xl., No. 2, p. 122.

https://doi.org/10.1017/S0022215100027171 Published online by Cambridge University Press

approximately 9 mm. in length and was roughly fusiform in shape; the general resemblance to the naked eye was that of a rather firm fibrous nasal polypus. The outer covering of the growth is an even layer of stratified squamous epithelium showing no papillæ and no signs of either proliferation or ulceration. The main mass of the tumour is composed of a reticulum of fine fibrous tissue. In this are seen numerous thin-walled blood spaces, the majority of which occur towards the periphery and, here and there, appear to be the foci of ordinary round-celled infiltrations. The walls of the blood spaces appear to be only one cell in thickness, but one or two larger vascular structures are to be seen which represent the arterial blood supply. There is nothing in the appearance of the cells of this connective tissue or of the vascular spaces which suggests malignancy. There is not an undue proportion of nuclei, and the staining reactions are those of normal tissues. The character of the tumour may best be expressed by calling it an angiofibroma.

Mr TILLEY said he believed the condition to be unique. He used the small direct speculum of Chevalier Jackson and a mere spot of blood marked the insertion of the growth after it was removed.

Congenital Stridor or Laryngeal Web—PHILIP FRANKLIN, F.R.C.S.—Female, at 7½ months, had inspiratory stridor with fortnightly attacks of dyspnœa.

By direct examination without anæsthesia no accurate observation was made.

Stridor was not urgent. At 1 year 11 months stridor much the same—child well developed, healthy, no cause for anxiety; unable to cry; no voice except occasional high-pitched note. Direct examination with general anæsthetic revealed webbing of anterior one-third of cords. The appearance resembled a dense white union, much like scar tissue and not as a bluish membrane.

Dr DOUGLAS GUTHRIE said he had under treatment a similar case, in a baby of 2 months. It was brought with the history that it suffered from difficulty in swallowing since birth. The difficulty of examination by the direct method without an anæsthetic in a small infant was very great, largely in the matter of controlling it.

Dr W. H. KELSON said it was easy to cut such webs, but not easy to prevent subsequent joining up. He had a case in a man who had suffered from epithelioma of the anterior commissure, which he (the speaker) removed. The anterior part of the vocal cords persisted in joining up afterwards. He did not know whether it would be possible to get one cord covered with epithelium, by skin-grafting, or otherwise. Sir William Milligan told him that he had a tube which he used successfully in such cases.

Mr E. D. D. DAVIS suggested that this patient should be examined by suspension laryngoscopy or by Haslinger's directoscope and the web excised. Excision could be repeated if necessary, but, if an intubation tube were to be left in the larynx, ulceration and stenosis would be liable to occur. Children were more easily examined by suspension laryngoscopy than adults.

https://doi.org/10.1017/S0022215100027171 Published online by Cambridge University Press

Mr HAROLD BARWELL said he had had patients of 3 and 4 years of age who had done very well with treatment by prolonged intubation.

Mr J. F. O'MALLEY said he had had a case in which a toy-gun bullet went across the larynx in a child. Acting on advice, he incised the web, and he had had difficulty with it. After settling down it appeared again.

Sir JAMES DUNDAS-GRANT said it was important to foster the growth of the larynx; he therefore suggested breathing exercises, and encouraging the child to shout, in the hope that when the larynx enlarged as a whole, the web would not increase with it. There was enough mobile cord to produce a voice. He would avoid operative interference unless it were called for by difficulty in breathing.

Mr FRANKLIN (in reply) said that he agreed with Mr E. D. D. Davis that if anything was to be done, suspension laryngoscopy was the right method, though he did not agree with him regarding after-treatment by intubation. He (the speaker) had had considerable experience of intubation in children, even under a year old, and he did not observe any trauma or subsequent scarring after the use of an intubation tube. He would incise the web.

Thyroglossal Cyst—F. J. CLEMINSON, M.Ch.—Female, aged 28, was shown at the February meeting 1924. There was a cystic swelling in the thyrohyoid region mainly to left of mid-line and a very slight swelling of the left ventricular band, of bluish colour, traceable outwards under left aryepiglottic fold.

On 29th March, tumour was dissected out; hyoid bone was divided. A stalk running downwards was divided and ligatured. Thyroglossal cyst was diagnosed microscopically.

The *present condition* showed the left ventricular band as a bluish-purple swelling, somewhat larger than on last occasion when patient was shown.

Dr IRWIN MOORE said he considered that this was a typical diffuse angioma or telangiectatic tumour.

Papilloma of Larynx—F. J. CLEMINSON, M.Ch.—Male, aged 72, was shown by Mr O'Malley here on 5th May 1922. The patient had been hoarse for some months. There was an irregular elevation of inner part of anterior half of right vocal cord spreading to anterior part of left cord. Opinion then was that it might be malignant, and that thyro-fissure should be done.

On 20th June 1922, portion of growth removed by indirect method was found to be a simple papilloma.

Since then growth gradually increased in size, and extended now over anterior two-thirds of right cord and anterior one-third of left cord, and is now more prominent; no limitation in movement; pinkish colour, surface granular.

Mr A. J. WRIGHT said he considered the case malignant, and strongly advised removal.

https://doi.org/10.1017/S0022215100027171 Published online by Cambridge University Press

Miscellaneous

Sir JAMES DUNDAS-GRANT said that if laryngo-fissure were done in this case, it should be carried out in accordance with Chevalier Jackson's latest recommendation, because if one went boldly through the thyroid cartilage, one would cut into the middle of the tumour. Jackson had shown that with a small saw the operator could cut down through the cartilage without opening through the soft parts, and when the cartilage had been separated, the soft parts could be detached, and one could judge as to how much could be removed. He (the speaker) was not sure that this growth was malignant.

Mr J. F. O'MALLEY said that two years ago his view was that the growth was carcinoma, and in this he was supported by some members of the Section. The man's teeth were bad, and he advised their removal. The case then came under Mr Cleminson, who obtained a report on a portion that it was papilloma, but the growth was now considerably larger, and he still suspected it was malignant.

Dr IRWIN MOORE said he did not think the growth was attached to the cord; he believed it emanated from the sacculus laryngis; he took it to be a chronic hyperplasia of a fold of the sacculus, or else a fibroma. He thought thyro-fissure was indicated in this case.

Mr CLEMINSON (in reply) said he considered it was on the border-line between a malignant and a simple papilloma; at present the cord was not infiltrated. If left for a year it might become definitely malignant; therefore it was safer to do thyro-fissure, and he would remember to do it so as not to wound the tumour by the initial incision, as Sir James Dundas-Grant had suggested.

ABSTRACTS

MISCELLANEOUS.

Psicain, an artificial cocain. E. WATSON-WILLIAMS. (Specimens, etc., shown at Royal Soc. of Med., Sect. of Laryngol., 7th Nov. 1924.) (*Brit. Med. Journ.*, 3rd Jan. 1925, p. 11.)

Psicain is the acid tartrate of an artificial isomer of cocain; alkaloid content 67 per cent. It is soluble in water, making an acid solution. This is unharmed by brief boiling, and keeps well with the addition of $\frac{1}{4}$ per cent. Ac. Salicyl. to inhibit moulds.

Used in the nose, 7 per cent. psicain gives the same anæsthesia and ischæmia as 5 per cent. cocain hydrochloride. The new alkaloid has therefore the same anæsthetic value as cocain.

The experimental toxicity of psicain in guinea-pigs is three-fourths that of cocain hydrochloride; the new alkaloid has the same toxicity as cocain.

It is probable that excitement, fainting, etc., will not readily be produced by psicain. It may therefore be useful for persons easily

https://doi.org/10.1017/S0022215100027171 Published online by Cambridge University Press