SOCIETIES' PROCEEDINGS.

ROYAL SOCIETY OF MEDICINE—LARYNGOLOGICAL SECTION.

February 6, 1914.

DR. D. R. PATERSON, *President, in the Chair.*

Intranasal Operations on the Lachrymal Sac.—D. R. Paterson. [See JOURNAL OF LARYNGOLOGY, RHINOLOGY, AND OTOLOGY, April, 1914, p. 169, *et seq.*]

Double Intranasal Dacryocystotomy for Lachrymal Disease.—D. R. Paterson.—Girl, aged sixteen. "Watering" of both eyes noticed for three years. She had been treated two years ago for atrophic rhinitis, which was still present. About five weeks before admission a phlegmon appeared over the left lachrymal sac with the formation of an abscess or fistula. On the right side there was a blenorrhœa of the sac, a quantity of thin pus being evacuated on pressure. West's operation of opening the sac from the interior of the nose was done on both sides. On the right, part of the sac wall was overlapped by an affected ethmoidal cell, which was opened up; on the left it was necessary to resect the upper part of the septum in order to get room. The result of the operation was immediate and the fistula closed. The case illustrates (*a*) some conditions of the tear-sac brought about by stenosis—viz., blenorrhœa of the sac, dacryocystitis, phlegmon, and fistula, and their dependence often upon a nasal affection—*e. g.*, of an anterior ethmoidal cell, which may be laid bare only by operation; (*b*) the intranasal conditions usually met with in the operation; (*c*) the advantages of the intranasal route to the lachrymal sac.

Mr. HARMER had recently seen a gentleman, aged twenty-seven, who had had epiphora since he was aged fifteen, following upon an injury. He had consulted ophthalmic surgeons in different parts of the world, and had spent £2400 on operations of various kinds, but none of them had done good. In this country he did not think there had been enough experience to know what the results of the intranasal operations were. They were easy to perform. The first results were quite satisfactory.

Mr. HERBERT TILLEY asked what was the swelling in the right nostril; it appeared to be the anterior end of the middle turbinal. He had done the operation only once, and that was last week, so he could not say anything definite about results. It appeared to be easy when the ethmoidal cell had been got out of the way, with the finger externally on the lachrymal sac to prevent damage being done. In the case of a very narrow nose the operation might be a difficult procedure.

Dr. DONELAN thought the difference of opinion as to the merits of the external and internal methods would be settled by a more careful selection of cases for each mode of operating. It seemed to him that those in which the obstruction was high up in the lachrymal canal, or which were of purely ocular origin, would be better treated by the external operation which had, moreover, the advantage of not opening healthy ethmoidal cells. On the other hand, in cases due to intranasal disease the internal

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method would be found preferable. Dr. Donelan thought it was Strazza who first performed and described the operation, now known as West's, in the same year, 1904, as Toti published his external method.

Mr. HOWARTH agreed with Mr. Harmer that this was an operation that they would all have to perform: he thought that the cases which would probably come under their notice would not be simple stenosis cases, but those of purulent dacryocystitis, where the suppuration was being kept up by a diseased ethmoidal cell. His experience was limited to two cases in which excision of the lachrymal sac had failed to cure the condition. He did West's operation, but did not find it easy, as the ascending process of the superior maxilla appeared to overhang the duct and made the approach difficult. This operation was satisfactory in that it enabled the surgeon to deal effectively with those anterior ethmoidal cells which lie in front of the hiatus semilunaris and abut on the lachrymal duct. It was as yet early to say what the results were likely to be.

Dr. JOBSON HORNE hoped that an operation which promised to be beneficial in suitable cases would not be brought into discredit by eagerness out-running discretion; and that they would hear more of the contra-indications and of the difficulties in performing the operation.

Dr. DAN MCKENZIE showed a case in which the operation was done eighteen months ago. He had not seen it for eight months and one could not now see any signs of the operation wound in the nose. The patient was quite cured.

Mr. E. D. DAVIS said on the cadaver the operation did not seem to him difficult. One patient, however, had a very deep middle meatus, and an overhanging nasal process, and that was a very difficult operation.

The PRESIDENT, replying to Dr. Hill, said the question of slitting the canaliculus to introduce a probe was a point of controversy between Polyak and West. West usually slit the punctum and introduced a stile, and that made it easier. Polyak held that the suction action of the punctum was thereby interfered with, and it was not desirable to do that more than could be helped. In his own cases he (the President) had not touched the punctum, except to syringe through afterwards. One could easily feel the probe in the sac from the outside; one could also easily measure by one's eye, and determine the position of the sac. He agreed that the first to do the operation was Strazza, of Genoa, who did it in 1904, though he had not done any since. West had done 130 cases, with a very large percentage (90) of what may be regarded as cures. The latest figures from Polyak were forty-two operations. He thought that ophthalmologists would hand over these cases in future, when sufficient experience of the lasting results of the operation had been gained, for it was not difficult to carry out, and its success was striking.

Resection of the Pharnyx for Carcinoma.—E. B. Waggett.—Woman, aged forty-seven. Operation in February, 1913. The flap was cut with the intention of removing the larynx with the pharynx; consequently, no skin was available for a plastic operation. The whole of the hypopharynx was removed with the exception of a strip of the right lateral wall $\frac{1}{2}$ in. broad. Case shown to illustrate: (*a*) spontaneous adaptability of the parts; (*b*) absence of cicatricial stricture; (*c*) functional recovery of the left arytænoideus posticus muscle.

Resection of Larynx and Pharynx.—E. B. Waggett.—Debilitated man, aged sixty-five. Extensive carcinoma of pharynx, laryngeal vesti-

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bule, and tongue, commencing in left pyriform fossa. Palliative measures dictated by dyspnœa and very severe dysphagia. At the patient's request a radical operation was performed in November. A strip of the right pharyngeal wall, ½ in. broad, was retained. The case illustrates the spontaneous adaptability of the parts still in process of healing. Facial palsy was produced by a very extensive gland operation with resection of the sternomastoid.

Sir FELIX SEMON congratulated Mr. Waggett on the success in his first case, not only because it was a brilliant case, but because it represented the victory of a principle—namely, of the triumph of the early diagnosis in these extrinsic cases, which so far had been so sadly wanting. He had never been much enamoured of the operation for total extirpation of the larynx, though he admitted that it could not be helped in some cases. But henceforth, just as in intrinsic cases, the ground had been cleared for thyrotomy by early diagnosis, thus it should be the endeavour of every laryngologist to diagnose also extrinsic cases so early that, as shown by Mr. Waggett's case, it was no longer necessary to remove the whole larynx.

The PRESIDENT thought that laryngologists in this country were, perhaps, not hopeful enough of such cases. Three or four months ago he saw some excellent results in Prof. Glück's clinic.

Mr. WAGGETT replied that these two cases were at the extreme poles of the class of case to which they belonged. In one case there was early diagnosis, thanks to the direct method; the other he had watched dying for six or eight months, and finally, *ad misericordiam*, he had removed the larynx at his request. He was not proud of the technique in the first case. The operation was started as an extirpation of the larynx, but, finding the larynx could be retained, he did the best he could under the circumstances, there being no skin-flaps available. He brought the case forward in order to show that Nature sometimes did all that was required. The woman seemed bound to have an almost complete stricture of the pharynx, but the event proved otherwise, and she now swallowed ordinary solid food, and did so better day by day; and twelve months had elapsed since the operation. Whether this happy circumstance was due to the nasal tube having been kept from the nose to the stomach for six weeks he could not say, but the presence of a foreign body prevented close cicatrisation of the parts, and enabled the strip of mucous membrane, ½ in. broad, left in the right fornix, to cover the raw surface. Now a bougie the size of the little finger could be passed through the stricture.

Advanced Gummatous Laryngitis.—G. H. L. Whale.—Woman, twenty-three. When first seen by the exhibitor, one month ago, the the infiltration of epiglottis, ventricular bands, and arytænoids quite obscured the rima. Through a Killian's spatula he removed a piece of each arytænoid. The pathological report stated: Granuloma with no giant-cell systems; Wassermann's test positive. On January 13, he gave her 0·9 gr. of "914" intravenously. Marked local, but no general, reaction. One week later the lesion was clearing, both cords were visible. Specimens were shown.

Sphenoidal Sinus, after Operation, showing Good Drainage.—G. H. L. Whale.—Female, aged fifty-one. Operated on five months ago. Concentric closure of the sinus mouth by mucosa, which so often gave a disappointing result in these cases, had not occurred. The other

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sphenoidal sinus was not at present accessible, owing to a deflection of the septum; and headache had disappeared from the operated side of the head, but not from the other side.

(?) Lupus of the Nose.—G. H. L. Whale.—Male, aged twelve. There was much heaping-up of granulomatous mass on columella. The disease extended on to the outer wall of left vestibule. Duration of disease, one year with intermissions. The case was shown for diagnosis, because the angry red appearance of the mass, and the absence of apple-jelly areas, had led several surgeons to diagnose streptococcal infection.

Dr. DONELAN asked what portion of the arytænoid was removed.

Dr. JOBSON HORNE deprecated the removal of a piece of each arytænoid from the larynx. If it was done for diagnostic purposes, then, Dr. Horne considered the Wasserman test would have been in every way sufficient. He had frequently seen similar cases rapidly clear up under iodide of potassium and mercury without any surgical intervention.

Mr. WHALE replied that with regard to iodide being sufficient, some liked to use modern methods, so he gave the patient salvarsan, and the case was doing very well. The case was sent to him by a dermatologist as being tubercle. The laryngeal appearances suggested a post-cricoid growth, with œdema all over it, and he punched a piece out to exclude neoplasm.

Inflammatory Fixation of the Left Arytænoid following supposed Impaction of a Foreign Body in the Larynx.—George Wilkinson.—The man, aged sixty-eight, was seen first on the evening of October 21, 1913. About seven hours earlier in the day, whilst eating some "hash," he choked and felt a piece of meat stick in the throat. He made violent expulsive efforts and attempted to dislodge the obstruction by repeatedly passing his finger down his throat. He "could get hold of something, though he could not get it up." On examination great difficulty was experienced in obtaining a view of the larynx, owing to the patient "gagging." After cocainisation a view was obtained by direct laryngoscopy. The epiglottis, arytænoids, and aryepiglottic folds were inflamed and much swollen, the swelling being more considerable on the left than on the right side. On the posterior surface of the epiglottis was a plaque of fibrin, which was readily removed by the forceps. The underlying surface was excoriated. Severe pricking pain on swallowing persisted for some days. The voice remains weak and husky. Swelling still remains, chiefly of the left ventricular band. The left arytænoid is displaced outwards and somewhat forwards, and does not move perceptibly on phonation, though there is some adduction of the left vocal cord. Nothing abnormal was seen on the X-ray screen. An examination was made by direct laryngoscopy on December 16 under general anæsthesia. No foreign body was detected.

Foreign Body (a piece of bookbinding wire) removed under Direct Laryngoscopy, after having been impacted in the Larynx Four Months.—George Wilkinson.—The patient, a boy aged three, was first seen on October 30, 1913. The child had been admitted to a fever hospital on July 6, notified as diphtheria, with laryngeal obstruction which had begun four days previously. Antitoxin had been given. A tracheotomy was done. Subsequent examination of swabbings from the throat showed absence of Klebs-Loeffler bacillus. The tube was removed, and had to be replaced several times. Early in October an abscess appeared to have formed within the larynx, and to have burst with free

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discharge of pus through the tracheotomy wound. At this time there was great dyspnœa, in spite of the presence of the tube. The tracheotomy wound had now healed, but there was decided laryngeal stridor, croupy cough, and husky voice. Examination by direct laryngoscopy immediately revealed a bright band below the left vocal chord, lying antero-posteriorly, visible during inspiration. It looked like a pin. It was grasped by the forceps, and readily removed after the point had been disengaged from the mucous membrane below the anterior commissure in which it was embedded. It was found to be a piece of bookbinding wire, bent into the form of a letter Z. All symptoms disappeared next day.

The PRESIDENT said some years ago he recorded an instance of an infant, aged nine months, which had a collar-stud impacted in the larynx, where it remained three months. The child had a choking fit at the time, and then the parents forgot about it. Three months later the infant began to crow, and when seen at the hospital it had definite stridor. Examination by the direct method revealed the body impacted in the larynx.

Dr. H. J. DAVIS said he thought the first case looked rather like malignant disease of the larynx. There was more infiltration and fixation than trauma from a foreign body usually produced. With regard to "getting hold of something which could not be brought up," it was easy for a person to catch hold of his own hyoid bone and try to pull it out, and this was sometimes done. He knew of the case of a nun who, some twenty years ago, was brought up to a casualty department with the history of a rabbit bone impacted in the throat. An enthusiastic dresser said he could feel the bone with his finger, and, seizing a large pair of old Mackenzie forceps, pulled out the end of the great cornu of the hyoid bone with the muscles attached.

Mr. HERBERT TILLEY thought the possibility of malignant disease should be borne in mind. The possibility of a foreign body had also occured to him, but he felt sure that Mr. Wilkinson would have satisfactorily excluded this factor.

Sir FELIX SEMON said the disturbance produced by a foreign body could result in lasting ankylosis of the arytænoid cartilage. He remembered two cases, both of which he had described. In the first, a boy got a pin which was driven, through a swallowing movement, through the aryepiglottic fold, close to the arytænoid cartilage, so that the point of the pin was in the œsophagus. A casualty surgeon sent the case up to a surgeon, and the latter proceeded to put his finger into the patient's throat to ascertain its situation. But when he wanted to withdraw his finger it got caught by the point of the pin, and the more he tried to withdraw it more he was pricked. Ultimately the patient was sent to the Throat Department, where the pin was easily visible, and was removed. There remained, however, lasting ankylosis of the arytænoid articulation. The second case was one of impaction of a walnut-shell in the larynx, which set up so much swelling and irritation that, if there had not been a definite history of a foreign body, the laryngoscopic appearance would certainly have been regarded as characteristic of malignant disease. It was removed by external operation, but in that case also there remained lasting ankylosis of the crico-arytænoid articulation.

Mr. WILKINSON, in reply, said, with reference to his first case, that it was a fear that the infiltration of the larynx might be malignant, which induced him to subject the man to a general anæsthetic and direct inspection of the larynx. This was over a month ago, and at that time the left arytænoid overhung the glottis so much that he could not get any

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view of the interior of the larynx by indirect inspection. Since then the swelling had gone down very much, and the mobility of the arytænoid cartilage had definitely increased. That seemed to be against malignancy. By direct inspection he could find no sign of malignant growth on the surface of the larynx. There was no evidence of any foreign body having ever got into the larynx, though it is clear that he had some choking during eating. His own idea was that the damage might have been caused by the man's finger-nail. He saw the case seven hours after the choking attack, and the man was still in great distress, and was working away at his throat with his finger. The larynx was very red and swollen, and that swelling remained without much change for over two months. Was it possible for a man to scratch the inside of his own larynx with his finger-nail? The marks at the back of the epiglottis seen at the first examination looked very much like scratches.

Orbital Cellulitis due to Ethmoidal and Frontal Sinus Disease.—**H. A. Kisch.**—C. B——, aged fourteen, when first seen was suffering from orbital cellulitis. An abscess had formed two months previously above the left eyelid, and had burst, leaving a fistula, the orifice of which was situated just above the upper eyelid and about half-way out. A probe inserted through this fistula passed into a cavity which was found to contain pus. On examining the nose, pus was seen under the middle turbinal, and there was extensive ethmoidal disease. On December 16, 1913, an operation was performed. The fistula was found to lead into an ethmoidal cell, and the frontal sinus was full of pus. The complete Killian operation was performed, and the patient rapidly recovered.

Cicatrical Pharyngeal Diaphragm following Scarlet Fever.—**J. F. O'Malley.**—A boy, aged five, had scarlatina two years ago, and was then for about three months in a fever hospital. On returning from hospital it was noticed that he "spoke through his nose," and the condition has become worse since then. He can swallow solids and liquids without difficulty, and there is no history of interference with breathing.

On examinationof the throat one sees a diaphragm, appearing as a continuation downwards of the soft palate and formed by the union of the free edges of the two posterior pillars. It shuts off the naso- from the oro- and hypopharynx and is complete except at the centre of its upper and lower borders. The upper opening is a small space surrounding the normal uvula, in which the latter is free to move. At the lower border there are two openings, one on each side of a central adhesion, which passes obliquely downwards and backwards to the right and is attached to the posterior wall of the pharynx, opposite the level of the epiglottis.

The anterior pillars, at their upper ends, blend with the new diaphragm, whilst the lower ends are normal and behind the latter. On the anterior aspect of the new formation the tonsils can be seen appearing rather superficial owing to the partial obliteration of the sinus tonsillaris.

The PRESIDENT said he supposed Mr. O'Malley would be able to pass a probe behind right away down, as there did not seem to be attachment to the posterior wall of pharynx, except at the lower border.

Dr. DONELAN thought it would be easily dealt with by simple division and suturing over the cut edges.

Mr. HARMER said that the difficulty was that the adhesion was likely

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to form again after a cutting operation. He suggested that recurrence would be less likely if division were made by diathermy.

Mr. O'Malley replied that if one cut down the middle line there was merely connective tissue substance, having no contractile power, and with inspiration or suction of air it would be quickly drawn against the nasopharynx and adhere again. He believed the method of formation of these adhesions was as follows: There was an intense inflammation with inflammatory infiltration, and at the same time a myositis which put the muscular tissue in a condition of paresis. The swelling and infiltration, especially in the young child, facilitated the coming together of the parts, and the intensity of the myositis prevented the mobility which would otherwise exist and enable the parts to come away from each other. A denudation of epithelium proceeded at the same time, owing to the severity of the inflammation, and that facilitated the joining up.

Demonstration of the Exhibitor's Method of Intranasal Operation for Antral Sinus Suppuration.—P. Watson-Williams. [See Journal of Laryngology, Rhinology, and Otology, March, 1914, p. 113, *et seq.*]

The President asked if the exhibitor made a point of taking away the anterior ridge of the inner wall of the antrum. In the case of any secretion in the antrum, and the patient bending down, might not the secretion tend to fall out? He remembered once it was a serious inconvenience, for a patient had some watery secretion from the antrum for some time, and when she bent down at mealtimes it often fell out.

Dr. Watson-Williams replied that one of the advantages of doing the operation in the way he advocated was that the patient was able to blow his nose clear of secretion in the antrum. The current of air entered the antrum, swished round the corner and took everything out. But if a ridge of the anterior part of the inferior meatal wall was left, the pocket retained the secretions and the patient was more likely to have his antrum constantly sodden. In the large preponderance of cases in adults the antrum developed forwards, so that one could bring the opening slightly in front of the end of the inferior turbinal. When the antrum was small that could not be done. The intranasal operation in such cases gave good results and was not more difficult, only it did not bring the aperture forward in the way shown in the specimen.

? New Growth of Ventricle of Larynx.—C. I. Graham.—Female, aged forty-seven. Hoarseness and cough for three or four months. A small portion of the growth has been removed for microscopical examination. There was a smooth sessile swelling in the anterior part of left ventricle, obscuring the anterior third of corresponding vocal cord. The overlying mucous membrane was paler than that of the larynx generally. The colour and movement of the cords are normal. There are no palpable glands in the neck, and Wassermann's reaction is negative.

Dr. Jobson Horne referred to a paper which he read at the meeting of the British Medical Association at Brighton last year on "Tumours of the Ventricle of the Larynx." In that paper he had described a hyperplasia of the ventricular band which he had observed years ago in the *post-mortem* room and also clinically, and which simulated a tumour of the band. He regarded the case before them as one of innocent hyperplasia of the kind he had described.

Mr. Graham agreed.

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Double Ogston's Operation performed for Chronic Frontal Sinus Disease.—W. Stuart Low.—The exhibitor considers that the success in this case and the absence of blemish are to be attributed to the method adopted, viz., by commencing the incision under the eyebrow, gradually sloping upwards, and then stretching the tissues upwards; the periosteum was divided high up and stretched downwards. When the wound is stitched up these displaced tissues return to their original position, so that a valve-like wound results, the one flap overlapping the other obliquely. The wound is protected from bandage pressure by means of a specially shaped cage which, having rubber-covered edges, acts like a Bier's band in facilitating rapid union—it also allows of free exudation of fluid between the edges of the wound. The method had been followed by restitution of bone, and is one of the advantages gained, another being diminution of deformity by preventing collapse of the anterior sinus wall. The patient was operated upon last July, fourteen days intervening between the two operations.

The exhibitor favours the Ogston operation in preference to the Killian, and he exhibited the case, which was a very severe one of its kind, as an example of many more treated similarly with success by the Ogston method.

Double Paralysis of the Superior Laryngeal Nerves in the Course of Disseminated Sclerosis from Lead Poisoning.[1]**—James Donelan.**—Male, aged twenty-six. As the history of this case has been fully given already in the *Proceedings* it has been suggested that, in view of the great rarity of reported cases, it may be well to call attention here only to the laryngeal symptoms.

Owing to the advancing nerve degeneration, which now affects about equally both crico-thyroid muscles, on phonation the anterior end of the glottis is now no longer turned obliquely to the right, the side first affected, from overaction of the still comparatively unimpaired muscle of the opposite side. The interior of the larynx is now somewhat more difficult to see owing to increasing paralysis of the tongue and epiglottic muscles. The bending forwards of the arytænoid cartilages is also more marked. On phonation with gentle expiration the classical wavy outline of the glottis can be well seen, but this is lost if the air-stream is forced and the elliptical glottis is formed. With stronger expiration the cords are blown upwards and flap in the air current. The patient can sustain a low, rough note fairly well, but it is impossible for him to raise the pitch more than one or two tones, and then he cannot sustain the note. Careful palpation shows that the distance between the thyroid and cricoid cartilages is not diminished perceptibly on phonation. Owing to the paralysis of the pharynx, tongue, and epiglottis, the patient is often troubled by the entrance of solid and liquid food into the larynx.

Dr. Jobson Horne said there appeared to be good adduction and abduction of the cords, but the tension of the cords was impaired.

Sir Felix Semon said that in this case, if he had not heard Dr. Donelan's description that there was double superior laryngeal paralysis, he would not have seen it. To be frank, he saw nothing but a little relaxation of the vocal cords. Cases of genuine paralysis of the crico-thyroid muscles were extremely rare, but the wavy outlines of the vocal cords seen in them looked very different from what was at present visible

[1] Shown at the meeting of June 6, 1913; see Journ. of Laryngol., Rhinol., and Otol., Jan., 1914, p. 33.

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in the case shown. In this case he could say nothing more than that there was some relaxation of the vocal cords.

Dr. DONELAN regretted that Sir Felix Semon was not present on one of the earlier occasions on which he had shown this case, or that he had not seen it earlier in the sitting, when the patient was less fatigued, and when the wavy line was more easily elicited. It seemed to depend a good deal on the power of controlling the expired air, so that the cords did not blow apart. He had now had the patient under observation for over eighteen months, and had had the good fortune of following the gradual development of the symptoms. He had seen no report of a case in which this had happened. He had not the slightest doubt as to this being one of double paralysis of the superior laryngeal nerves. If he had it would have been dissipated by the observations of two such excellent witnesses as Sir Felix Semon and Dr. William Hill, for slackness of the vocal cords and their almost complete disappearance under the lateral walls on inspiration were the two cardinal features of this rare disease, which had been described by nearly everyone who had published cases. He could not attribute any other diagnostic significance to these features in the present case, than that they showed the loss of crico-thyroid control over the other muscles. There appeared to be lately some failure of the transversus, which might be due to a partial innervation from the superior laryngeal nerves.

Double Abductor Paralysis in a Child, aged eight.—C. W. M. Hope.—Child, aged eight, was admitted to hospital, 1913, with marked dyspnœa. Up to fourteen days before admission was perfectly well; gradual onset of dyspnœa, but voice was not noticed to be altered.

When first seen the voice was good, but there was marked dyspnœa, sucking in of intercostal spaces and supra-clavicular regions; marked retraction of lower end of sternum, and slight cyanosis. Temperature normal; pulse 120. On examination by the direct method under chloroform both cords were found fully adducted, normal in colour, and no movement seen, either of them or of the arytænoids, which were of normal size. Only a tiny area for aeration at posterior end of glottis. Intubation tried with O'Dwyer's tubes, but they were coughed out within a few minutes of introduction. Tracheotomy was then performed. After four days tube was blocked by day and opened by night. Swab from larynx showed absence of Klebs-Loeffler bacilli.

Three weeks later cords showed some movement; there was slight abduction and also some movement of the arytænoids.

Tracheotomy tube had been removed and left out on January 14, 1914, but owing to night stridor was replaced (low tracheotomy) on January 29, 1914. Skiagram of chest shows no enlargement of thymus gland or any increase in size of bronchial glands. No diagnosis has been arrived at as to the cause of the paralysis.

Dr. LAMBERT LACK said at present he had a case of exactly the same nature, in a small child. Tracheotomy was done over two years ago. When the child was seen in the out-patient room the cords appeared to be normal, and the cause of the stridor and dyspnœa was not recognised. On passing a bronchoscope to ascertain the cause of the dyspnœa, directly the instrument entered the larynx the dyspnœa was relieved. On removing the bronchoscope again, it was seen that the cords remained in the middle line. Tracheotomy was performed, and after some months the tube was left out, as the cords seemed to move a little. But during the last week the child had come up again very ill

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and suffering from loss of weight; it was not half the size it should be for its age. Obviously it had been suffering from deficient oxygenation for years. Now that the tube had been replaced, the child's development would probably go on. No cause could be discovered for the paralysis, and the condition appeared to be congenital. Some years ago he showed another case in a girl, aged eighteen, in whom no cause could be found for the paralysis, and in her also the history dated back almost to infancy.

Dr. PETERS had seen this condition exist to a modified degree with congenital deformation of the epiglottis, and he believed it was characteristic that the voice was not lost, and the paresis varied greatly.

Dr. H. J. DAVIS thought both recurrent laryngeal nerves were being pressed upon by enlarged mediastinal glands, and he had recently had a case very similar in a child, aged two, who died with left total recurrent paralysis, due to pressure of lymphomatous glands in the thorax. The child was sent to him as a case of foreign body in the lung. The child got worse, developing bronchitis and paresis of the other cord. As soon as the bronchoscope was passed the child breathed easily. He did a tracheotomy, but three weeks later the child suddenly died. *Post-mortem:* Enlarged glands were found in the mediastinum, the left recurrent laryngeal nerve being implicated in the mass. The glands were lymphomatous, and there was no sign of tubercle.

Note of the Result of Treatment of an Unusual Case of Adductor Paresis.[1]—**E. D. Davis.**—Acting on the suggestion kindly given by some of those members present who saw the case of a healthy gardener suffering from what was considered to be an intractable case of functional aphonia, the patient was anæsthetised on January 27 and the larynx thoroughly examined by suspension laryngoscopy and the bronchoscope. There was practically no movement of the vocal cords, which remained more or less hidden in complete abduction. The hypopharynx and trachea were normal. Stimulation by the intra-laryngeal electrode, with the full strength of the battery, produced no effect beyond a slight movement of the epiglottis and posterior commissure, probably produced by contraction of the arytæno-epiglottidean folds. It is suggested that the case is one of paralytic contracture or atrophy of the laryngeal muscles. Intra-laryngeal stimulation on recovery from the anæsthetic was unsuccessful.

Sir FELIX SEMON asked what was meant by the words "It is suggested that the case is one of paralytic contracture or atrophy of the laryngeal muscles."

Mr. E. D. DAVIS feared the explanation asked for was very difficult to give. Dr. Gordon Holmes said the case could not be functional if there was paralytic contracture, but Dr. Holmes could not find organic disease. Five years ago, when he saw the patient, it was a case such as is described in the text-books as paralysis of the arytænoideus, with a chink in the posterior third of the glottis, forming a triangular interval. The cords moved well, but, on vocalisation, only the anterior two-thirds of the cords came together. There was a chink at the back. He did not see the patient for five years, but he saw him repeatedly when he had arytænoideus paralysis. The man deserted the hospital, and then came up again five years later.

[1] Shown at the last meeting of the Section held on January 9. See JOURNAL OF LARYNGOLOGY, RHINOLOGY, AND OTOLOGY, April, 1914, p. 205.

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Sir FELIX SEMON wished to make some observations on this case because he would be sorry for any loose expression to go unchallenged. He could not help asking: Why make any suggestion? There was no need for it in the present case. He thought everyone who had had experience would say it was a case of functional double paralysis of the adductors. It happened in a male, which was not an unheard-of thing, and the cords stood very widely apart. Neither was that unheard of. If one read the older literature, that which was produced in the infancy of laryngology, one would find several cases described in which the glottis during quiet respiration was so widely open that it would admit a full-sized finger. Such cases had been described by Czermak and Solis Cohen. In his own paper on "Abductor Tonus," though that was published twenty-four years ago and perhaps had therefore no right to be quoted nowadays, one would find it stated that in quietly breathing people the width of the glottis amounted sometimes to 14 mm. when seen with the graduated mirror, which corresponded to 19 mm. actual width. If in such a case functional bilateral adductor paralysis occurred, as, he had no doubt, had occurred in this case, there was no need to seek refuge in a paralytic contracture, a hypothesis which, he was glad to hear, had already been combated by Dr. Gordon Holmes on general neurological grounds. It was sufficient to describe it as a double adductor paralysis in a man whose glottis, before he had anything the matter with him, was probably widely open in quiet respiration. The mere fact that this case had not yielded to treatment did not stamp it as an extraordinary one. Again he would revert to the older literature, in which one could read cases described by Sir Morell Mackenzie or any of the older writers, in which, while they succeeded almost universally in functional paralysis in restoring function by electricity, or hypnotic suggestion, or by cold water douche, or by central faradisation, or methodical voice practice, or other methods, they freely admitted that there were always a few cases remaining in which practically no method was of avail. The present case seemed to be one of those, and he would not be surprised if, when the paresis had lasted ten years or more, one day, without apparent rhyme or reason, the voice were to return. Perhaps the oldest case on record was that described by Herodotus, in which the patient, the son of Crœsus, suddenly regained his voice when someone was about to slay his father, for he suddenly shouted, "Do not kill the king." That might have been a case of hysterical mutism, but anyhow it was under the influence of a strong emotion that the voice came back, and very likely the voice would come back to the present patient under some such stimulus.

Dr. LAMBERT LACK said he was much interested in what Sir Felix Semon had just said. The majority of functional aphonias recovered, but a few did not. Why was it that the cases which did not recover were those which showed paralysis of the arytænoideus? In his experience, it was those cases where there was a triangular opening between the posterior parts of the vocal cords which did not yield to treatment; in fact, that class of case produced all the failures. He thought that some of these cases were organic. There was one case in the hospital in Golden Square who attended during Sir Morell Mackenzie's time. She was attending for forty years, and at the end of that time the larynx gave exactly the same picture as when at first seen. He had since seen two or three others in his practice, and all had paralysis of the arytænoideus, that being apparently the only adductor affected. The case which Sir Felix Semon mentioned was one of functional mutism.

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Sir FELIX SEMON rejoined that the case referred to by Dr. Lack was absolutely different from Mr. Davis's case. He remembered the case Dr. Lack spoke of. In Mr. Davis's case the glottis was open to the greatest possible width, and the vocal cords could scarcely be seen because they were lying close to the sides of the larynx, whilst the case mentioned by Dr. Lack was one of isolated paralysis of the interarytænoid muscle, possibly of peripheral neuritic or myopathic origin.

Paralysis of Right Vocal Cord.—W. H. Kelson.—F. R——, aged forty-eight, bus driver. Hoarse six months. No history of syphilis. Nothing abnormal detected in chest. Larynx congested. Right vocal cord appears to be fixed in a position between adduction and full abduction. Right arytænoid and right ventricular band much swollen. Epiglottis not swollen, but overhanging.

Pharyngeal Cyst.—W. Douglas Harmer.—A man, aged twenty-eight, was first seen in 1904 with an inflammatory swelling over the right lower jaw, which was probably due to dental causes. This was incised in July and again in September, a piece of bone being removed from the jaw on the second occasion. In 1907 he complained of pain in the right side of the throat and dysphagia; he was also slightly hoarse. Nothing abnormal was discovered. In 1909 the symptoms had increased, and a lump was first noticed on the right side of the pharynx. On swallowing, the swelling was displaced outwards by contraction of the pharyngeal muscles. The larynx was also displaced to the left by a rounded tumour, which filled the pyriform fossa. On its upper margin, close to the right border of the epiglottis, there were three small white nodules. Enlarged veins were seen in the mucosa covering the tumour. In November, 1909, an external incision was made by Mr. D'Arcy Power, and a thick-walled cyst was found in the wall of the pharynx, and removed. In 1910 the swelling reappeared, became suddenly painful and burst internally. The patient stated that he coughed up pus and was afterwards relieved. Since then the size of the cyst has varied from time to time. It is now larger than usual, and projects into the cavity of the larynx. The nodules have also increased in size.

The PRESIDENT said the case was a remarkable one; the cyst was of considerable size. Its site and the fact of its recurrence suggested a branchial origin. He asked what Mr. Harmer proposed to do with it.

Mr. HARMER replied that he thought it should be possible to dissect it away from the outside, and so remove the whole of it.

Thyroglossal Fistula.—Dan McKenzie.—This case was shown as illustrating two atypical features, namely: (1) the opening of the fistula above the hyoid bone, and (2) its situation well to one side of the middle line.

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