SOCIETIES' PROCEEDINGS.

ROYAL SOCIETY OF MEDICINE.—OTOLOGICAL SECTION.

February 20, 1914.

MR. RICHARD LAKE, *President, in the Chair.*

Abscess of Lateral Cerebellar Lobe; Recovery after Repeated Operations.—C. E. West.—Female, aged five. Old history of chronic discharge on both sides, with cessation for some time, and recent renewal of discharge on right side. Ill for a week, with headache, vomiting, and increasing drowsiness. On admission, July 5, 1912, patient was semi-conscious, with a coated tongue. There was discharge in the right ear. No squint, no neck-stiffness, reflexes normal, no Kernig or Babinski sign. Pulse irregular, 68; temperature, 97°–98° F.; respirations, 20 per minute. Slight lateral nystagmus on deviation of the eyes to the right. Operation (immediate): Radical mastoid, cholesteatoma; exposure of dura mater of posterior fossa, extradural suppuration. Sinus found leading through dura on inner side of lateral sinus to interior of cerebellum. Two drachms of foul pus evacuated. Tube drainage. Pus from abscess yielded pure streptococci. Lumbar puncture: Fluid sterile, 650 cells per cubic millimetre, 93 per cent. lymphocytes. Patient did well till July 13, when pulse fell to 62. Second operation: Exploration under anæsthetic—evacuation of about a drachm of pus. Improvement followed; then re-accumulation. Third operation (July 25): Removal of bone on outer side of sinus, and drainage of fresh collection in cerebellum; tube carried right through deep to sinus. Next day much worse, intense headache, pulse 60, respirations slow and irregular, less than 10 per minute. Fourth operation (July 26): Wide removal of tabular part of occipital bone and underlying dura mater. The exposed cerebellum was then boldly scooped out until the region of the abscess was widely exposed. The removed tissue was largely necrotic, and contained scattered small collections of pus. About half the lateral lobe of the cerebellum was removed in this way. Intravenous infusion at the end of the operation. Subsequent improvement, but a considerable hernia cerebelli developed. There was great wasting and weakness of the right limbs. At first there was a total loss of co-ordination in the right limbs, but this was gradually recovered. Fifth operation (September 18): Large flap of scalp and periosteum was slung downwards to cover the hernia, and the bared bone was grafted. There was intense shock. Recovery after pituitrin and intravenous saline. Slow healing of exposed bone after separation of several thin sequestra. For the past twelve months her health has been satisfactory. The hernia has slowly diminished in size and become firmer.

Mr. WEST wished the opinions of members as to the best way of draining brain abscess, particularly cerebellar abscess, because he failed to secure good drainage in many cases. The cerebro-spinal lymphocytosis was interesting; 93 per cent. of lymphocytes in the cerebro-spinal fluid in the brain abscess was unusual. In such cases the great proportion of cells were polymorphonuclear leucocytes. In this case lumbar puncture was made at the operation after the abscess was opened. He once

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showed a case at the Section in which a similar operation had been done on a temporo-sphenoidal abscess, and he thought the procedure of boldly opening up not only the cranium, but the brain also, so as to expose the deep infected area in desperate cases, was a justifiable and good course. Although deprived of a considerable quantity of brain-tissue such cases did not suffer much obvious disadvantage. The present child had now got less than one third of the right lateral lobe of the cerebellum, and most of that was underneath the flap.

Dr. H. J. Davis had not yet made up his mind as to the best way to drain brain abscess; the indication seemed to vary with each case. He was not decided either as to whether always to remove the dura mater over the abscess after it had been opened. If the dura mater were stripped over the entire area he thought the patient was more likely to die from meningitis. He had a case now which he had been treating for the last ten days, and he was certain the girl would not have lived if he had denuded the whole area of exposed brain. Hæmorrhage and necrosis were always liable to occur, if this was done, with subsequent sloughing. Three years ago he had exhibited a case[1] of a child who had much protruding brain-substance, and who used to put her hand under the bandage into the wound and pull out pieces of brain-tissue and put them into her mouth. She now was going about with a pulsating cranial tumour, and was aged fifteen, rather bad tempered but otherwise well. He was sure the proper material for drainage was gauze, or tubes covered with gauze, in which case it was the gauze which was efficacious. Tubes became blocked with *débris* and were no longer tubes.

Mr. Muecke said that at the London Hospital in every case in which they had left the drains inside the lateral sinus it had not been satisfactory. The bone was taken away from behind the sinus and the abscess tackled from behind with a very free wide opening. The tube had been found to be a great trouble. One of the most satisfactory things adopted lately, at the suggestion of Mr. Tod, was the use of an ordinary silver tracheotomy tube tied firmly in, the inner tube being removed for cleaning. The result had been excellent.

Mr. Westmacott said that in children with cerebellar abscess the best results were obtained by putting in a double rubber tube, one inside the other, or two tubes side by side, and leaving them in until the discharge ceased, without disturbing them at all. The inner tube could be removed or cleared out with a probe without disturbing the outer one. Sometimes when a single tube was taken out to clean it and then replaced the patient soon afterwards developed a temperature and died. It was difficult to get a tube back into the abscess properly, and fresh brain-tissue may be damaged in the attempt and encephalitis result.

Mr. Sydney Scott said one was struck by the frequency with which the lateral sinus was thrombosed, not necessarily with an infective thrombosis, but certainly by a plastic one. He asked whether this lateral sinus was thrombosed. He was coming to the conclusion that in a case of cerebellar abscess which was not doing well, it was right to open the cerebellar fossa, behind as well as mesial to the lateral sinus, and one could often cut right across the sinus without difficulty when the vessel was thrombosed. The cases to which Mr. Scott referred were not associated with the clinical signs usually met with in infective thrombosis.

Mr. West replied that the sinus was not thrombosed, but ultimately it was included in the area of the dura mater removed. He was interested in the suggestion to use a tracheotomy tube or a straight tube with a jacket.

[1] "Discussion on Cerebral Abscess," *Proceedings*, Otol. Section.

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He was not bringing this case forward to illustrate a routine method of treating cerebellar abscess. But in this case he had done everything he knew; he had opened it in front, and behind, and across the sinus, and the patient was at death's door because of the burrowing suppuration in the cerebellum. Under such circumstances only he thought it was wise to do what he had; he would not in the ordinary way disturb the adhesion of the dura mater to the brain. In such desperate cases it was only when one exposed deeply the infected area that one had a chance.

Herpes Zoster of the Auricle and Mastoid Region.—H. J. Davis.—A woman, aged twenty-six, was sent to him as a case of acute mastoid disease. There was some œdema and tenderness behind the left ear, accompanied by a papular and vesicular eruption on the back of the auricle, mastoid process and left cheek. This eruption had been preceded by great pain, which ceased, as is usually the case, on the appearance of the eruption. Dr. Pernet, to whom he referred the case, had agreed with the diagnosis. Herpes zoster of the auricle is an extremely rare condition.

Dr. URBAN PRITCHARD did not think it was always easy to diagnose a case of herpes zoster. A patient, whom he had spoken of before, was brought to him with all the signs, apparently, of acute mastoid disease, with complete facial paralysis, but hearing normal. On examining the membrane it was found to be bulging. There was no temperature. There was excessive pain, but no spots of herpes were visible at all. As the patient was hearing perfectly he said he would not open it, and he asked that he might see the patient again in a few days. The diagnosis was then easy, because in the concha there were three spots. He gave a good prognosis, and in four months the patient had quite recovered from the facial paralysis.

Mr. WHALE pointed out that if there was herpes of the internal meatus the geniculate ganglion might be at fault, because the impulse would go along the smaller superficial nerve and the auriculo-temporal. In Dr. Davis's case there was no herpes of the meatus or in front of the ear. There was herpes behind the ear, and that area was supplied by Jacobson's nerve; the connection between Jacobson's nerve and the facial occurred at the horizontal part of the facial, and therefore the seat of irritation must be behind the anterior genu and in front of the geniculate ganglion.

Mr. SYDNEY SCOTT remembered a case of herpes of the auricle associated with complete right side facial paralysis, deafness, and loss of function of the right vestibular nerve. The tympanic membranes, external meatus and Eustachian tubes were normal. He could not give a good prognosis in his case.

Mr. G. J. JENKINS understood this was not a case of geniculate herpes, but probably of herpes of the auricle. The posterior division of the great auricular supplied the external and the cranial aspect of the pinna. He asked if there was referred pain along the great occipital, which came from the same region in the spinal cord.

Dr. H. J. DAVIS replied that he thought it was a branch of the cervical plexus which was at fault. One could now see vesicles on the neck. They were not on the neck when he first saw the case, but they appeared there on the second day. The woman had had intense pain for a week, and it looked like a mastoid case; there was also considerable œdema over the mastoid process and over the posterior part of the concha. He saw nothing inside the ear. He thought it was herpes of the great auricular nerve. He did not regard it as a geniculate case; if it were so there would have been facial paralysis as well.

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Congenital Imperforate Meatus.—H. J. Davis.—A boy, aged fifteen, with an imperforate right meatus. The right ear was smaller than the left, and the meatus terminated blindly in a small dimple. He thought that the membrane must be present, and it was a question as to whether it would not be advisable to operate in this case. Hearing tests: Watch on contact and Weber right. The hearing in the left ear was normal.

Dr. KELSON had had cases and looked up the literature of the subject, which was discouraging; Mr. Tod collected a number of records, and there was, he thought, only one in which there was improvement. It was wiser not to operate, as the usual landmarks were absent, and the articulation of the jaw and other important structures were liable to be damaged.

Microscopical Section through a Right Temporal Bone from a Case of Lateral Sinus Thrombosis, to show Infection spreading through a Small Vessel in the Bone.—W. M. Mollison.—This vessel could be seen passing from the floor (?) of the antrum to the lateral sinus. The patient was a child, aged about nine, who had an acute mastoiditis, for which a surgeon performed Wilde's incision; at the time of the operation the patient had a high temperature, and five days later died with typical symptoms of generalised infection. *Post-mortem*, extensive thrombosis was present, and secondary infection of the lungs, in which abscesses were found.

Mr. JENKINS asked whether Mr. Mollison considered the thrombosis in the vein to be primary or secondary.

Mr. WEST said the case supported his view that lateral sinus thrombosis was almost always in the first place an intra-osseous thrombosis, and that infection rarely passed directly through the substance of the sinus wall. Sinus thrombosis with peri-sinus abscess was frequent, but in his experience always relatively late, and the sinus wall had been necrotic in every case he had seen. He believed these abscesses were secondary to the thrombosis and necrosis of the wall.

Mr. MOLLISON replied that it was not clear whether the section helped to prove Mr. West's point, but he had seen cases where he was convinced at operation that the infection had spread by means of a small vein through the bone, and not by direct extension. Beyond the region of obvious disease in some cases there was perhaps $\frac{1}{8}$ or $\frac{1}{4}$ in. of healthy bone, and then one came across pus next to the sinus wall. He could not say whether the clotting was primary or secondary. Two pathologists who saw the section thought the thrombosis had been there longer than the history of the case as related.

Left-sided Cerebello-pontine Lesion, probably Tumour.—W. M. Mollison.—Male, aged sixteen, attended hospital in May, 1913, on account of a left-sided facial paralysis. There was a suspicion that the paralysis was due to suppuration in the middle ear; the mastoid antrum was explored but found healthy. The patient was treated in the electrical department, as the case was taken to be one of Bell's palsy. In December last the patient was admitted for further investigation, and the conclusion was come to that there were evidences of a tumour of the left cerebello-pontine angle. There was paralysis of the seventh and eighth nerves on the left side, together with signs of pressure on the pyramidal fibres going to the right leg. A slight degree of nystagmus was also present. Vision defective, especially in the left eye. The gradual onset and the physical

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signs pointed to a tumour in the cerebello-pontine angle of the left side. Eyes: Vision in the right $\frac{6}{9}$, in the left, $\frac{6}{24}$; the left pupil reacted very feebly to light and there was papillœdema on both sides, more marked on the left; there was slight weakness of the left external rectus. The left globe was slightly dropped, due probably to involvement of the corpora quadrigemina. Examination of the ears: both membranes normal. With the "noise-apparatus" there was total deafness in the left ear; the right was normal. Nystagmus present; the patient had no vertigo, nor had he ever had any. He had some headache about a year ago but had none now. Gait ataxic and he could not stand on one foot with closed eyes, though he did not exhibit Romberg's sign; dysdiadokokinesis was present in slight degree. The nystagmus is horizontal and of a slow, coarse character when the patient looks to the left, about 80 per minute and very irregular, and quick and fine when the eyes are directed to the right, about 180 per minute. There was a spontaneous pointing error to the right with the left arm. Functional examination of the labyrinths: Caloric test.—After prolonged syringing of the right ear with ice-cooled water no alteration was produced in the spontaneous nystagmus, and there was no error in the pointing reaction. The same result was obtained after syringing the left ear. The only effect of syringing the right (the sound side) was that the patient had a tendency to fall to the right. Rotation.—The right labyrinth reacts, the left does not. This fact was elicited, not by observing nystagmus, as this is impossible, but by noting that the patient had a distinct tendency to fall (to the right ?) after turning in a counter-clockwise direction, and by noting the resulting errors in the pointing tests. After ten counter-clockwise turns (to the left) there was with the *right* arm a pointing error to the left, while the spontaneous error with the *left* arm tended to disappear. After ten clockwise turns there was no appreciable pointing error with the *right* arm and no change in the spontaneous error with the *left*; but after twenty turns there was a slight error to the right with the *right* arm, and distinct increase in the spontaneous error with the *left*. The results of these tests are compatible with a left-sided cerebellar lesion.

Mr. Sydney Scott asked Mr. Mollison whether the tongue was affected for taste. With regard to the functional examination of the labyrinth Mr. Mollison said, "after prolonged syringing of the right ear with ice-cooled water, no alteration was produced in the spontaneous nystagmus, and there was no error in the pointing reaction." He presumed the head was in the erect posture in that test. But of course it depended on the kind of pointing test; he would not expect an error in pointing when the caloric test was carried out with ice-cooled water with the head erect, unless one altered the position of the head and tested both hands. He asked what Mr. Mollison found if he turned the patient's head with chin towards the left, and the patient was directed to point at right angles to the side of the head. He could then emphasise the importance of ascertaining whether the right labyrinth functionated or not, not by the nystagmus, but by these forced movements of the head, trunk, and limbs, which were more easily observed, also by the effect on gait and on standing in the erect posture during the act of stimulation.

Mr. O'Malley asked Mr. Mollison what was the condition of the corneal reflex; was there a hypo-æsthetic condition of the face, suggesting involvement of the fifth ?

Mr. Mollison replied that there was loss of taste in front of the tongue on that side, but no wasting and no suggestion of involvement of that nerve. The fifth nerve, apparently, was not affected at all. He

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gathered that the slight difference in sensation in the face was due to involvement of the facial only. The case emphasised the importance of testing the hearing in all cases of facial paralysis.

Serial Microscopic Sections of the Labyrinth and Middle Ear, showing Ankylosis of the Stapes; Otosclerosis.—G. J. Jenkins.—The patient was a female, aged sixty-seven. The mental condition of the patient was not good, and so a complete satisfactory examination of the auditory apparatus was not possible. She had been deaf many years. There was no history of earache or discharge; tinnitus, "waves of the sea." Vertigo doubtful. The tympanic membrane did not show any sign of there having been any middle-ear inflammation at any time. Tuning-fork tests doubtful. Weber test: sound referred to right ear. Rinne test: bone-conduction greater that air-conduction. Bone-conduction (Edelmann's special fork) seemed much diminished in both ears. She could hear shouting, a raised conversational voice in right ear; nothing in the left. Both temporal bones were removed about eight hours after death and placed in a 4 per cent. solution of formalin in normal saline. In preparing the specimen the exhibitor adopted the method of decalcifying which Dr. Gray advised, *i. e.* with formalin and nitric acid. He did not think he had found the temporal bones cut so easily when decalcified with other reagents as with this. Also histologically this method gives the best results. The serial sections were of the right temporal bone, and have been cut transversely to the large axis of the petrous bone. The bone was cut in celloidin 12·5 mm. in thickness, every third section being mounted. The sections were stained variously by Mallory stain, hæmatoxylin and Van Gieson, iron-hæmatoxylin. A series of sections of the labyrinth and middle ear had been shown under the microscope, and he demonstrated the region of the stapes by the epidiascope. The ankylosis of the stapes to the margin of the foramen, the thickening of the base of the stapes and of the margin of the foramen by disease were demonstrated.[1]

Dr. Urban Pritchard asked whether Mr. Jenkins had tried the plan of keeping the piece of bone constantly agitated in a large quantity of that solution.

The President (Mr. Richard Lake) asked why it should be otosclerosis; he would have liked to know what the Wassermann reaction was. He had tried testing old people in infirmaries, and had to give it up as hopeless.

Mr. Sydney Scott asked whether Mr. Jenkins was ever troubled by gas-bubbles?

Mr. Jenkins replied that one made the diagnosis in this case largely on the microscopic evidence. Clinically he could not rely much on tests. There was no history of paracusis. The other joints of the middle ear were normal, and, as far as he could see, there was nothing else abnormal to be seen in the temporal bone. He did not carry out agitation of the fluid in the way mentioned by Dr. Pritchard. If the specimen was very important it was wise to keep it in the middle of the fluid and carry out agitation by means of a special apparatus. In decalcifying by this method one did not get air-bubbles in the labyrinth—at any rate as a serious feature. Air-bubble formation was not so obvious on the external surface of the temporal bone if the two elements of the fluid were left together for twenty-four hours before putting the specimen in.

[1] We hope to publish at an early date an article by Mr. Jenkins dealing with the histological pathology of otosclerosis.

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Re-education Treatment: Improvement in Hearing in a Congenitally Deaf Boy.—Richard Lake.—The patient was born in June, 1905. He had his adenoids removed in September, 1907. The boy was a deaf-mute without available hearing. From 1909 to 1913 he was regularly instructed in lip-reading with very good results. I examined him March 10, 1913, and found one island of hearing in the left ear for the whistle (only)—viz. A^4. He then began mechanical (re-educational) treatment, which has been employed with intervals of rest ever since. By the middle of April he heard a barrel-organ if quite close, as "a noise," and liked gramophones. By June, 1913, he heard vowel sounds shouted into the left ear; by August he could repeat nearly forty short sentences shouted into his left ear. Now he could recognise pitch in both ears, and he hears birds if close by. The teaching is, of course, equally of importance with the mechanical stimulation.

Deformities of External Ears.—J. H. Connolly.—Boy, aged eight. The right auditory meatus appears never to have been patent. The left meatus is represented by a narrow canal—not in the normal position—at the deepest part of which granulations can be seen. Discharge began to come from it about six months ago and has continued since. The child hears the voice in both ears; rather better on the left side than on the right. Electrical tests show that both labyrinth reactions are present. He asked if an attempt should be made to construct a meatus on the right side. The discharge and granulations in the left canal indicate operation for their relief, and at the same time the making, if possible, of a widely patent meatus on that side.

The PRESIDENT suggested that X rays might be used to see the situation of the meatus. He had not found such operations as that now suggested successful.

Dr. URBAN PRITCHARD said that he had not come across a single successful case of the kind.

Uncapping the External Semicircular Canal for Ménière's Symptoms; Complete Relief for Three Months.—W. H. Kelson.—Male, aged forty-three. Attacks began about three years ago with giddiness, buzzing noises and deafness in the right ear; after a time coldness and vomiting would come on. Duration of attack usually one to two hours. When giddy he felt himself falling backwards or forwards, or objects seemed to circle round him. He was never unconscious. Attacks became more frequent and work impossible. No giddiness between attacks. Sent to hospital on September 24. Examination showed, watch —right, $\frac{1}{30}$; left, $\frac{2}{30}$; C tuning-fork on vertex referred to right ear; —Rinne right, + Rinne left. Water at 22° C., right side nystagmus to left after sixty-nine seconds; water at 22° C., left side nystagmus to the right after thirty seconds. No Rombergism. Wassermann test negative. Operation (October 2, 1913). Outer wall of external semicircular canal (right) removed; escape of perilymph. For three months giddiness and tinnitus entirely disappeared, since when some very slight attacks.

The PRESIDENT said it was rare, in opening virgin labyrinths in which there was no suppuration, to find intra-labyrinthine fluid visible; he had only twice seen fluid in such labyrinths.

Mr. SYDNEY SCOTT thought that if he had a case like this he would feel disposed to open the middle ear at the first operation and observe whether it had any effect on the vertigo before he opened the semicircular canal, using the latter only as a last resort. One met with cases of Ménière's

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symptom-complex, with obstructive deafness, and it was a question whether the disease had not originated in the middle ear, producing a secondary influence on the internal ear. He would like to know the results of opening the antrum only.

Dr. H. J. Davis said that if one was able to relieve the vertigo by so simple a remedy as opening a semicircular canal, the complete vestibulotomy would not be found necessary. The question was whether there would be a tendency for vertigo to return in Dr. Kelson's case.

Mr. Jenkins said the operation was similar to the one he advocated some time ago for certain labyrinthine vertigo cases. His own cases were definitely labyrinthine conditions, and there was no doubt as to there being no middle-ear condition. He asked whether in this case there was any real indication of labyrinth deafness. Still, there had been improvement in the vertigo after this operation in this case; the patient was quite certain about it.

Mr. Muecke had seen a similar case in a boy, aged thirteen, following ordinary middle-ear suppuration. There was a constant vertigo, especially severe in winter. The boy was, in consequence, taken away from school. He had daily inflation for a fortnight, and the boy recovered and had not had another attack since, though that was three years ago.

Dr. Kelson replied that there was a little watery fluid. The fact that there was no improvement on inflation with the catheter showed that opening the antrum alone would not be likely to suffice; and even if it were so, it would have to be kept open permanently—a troublesome matter.

PROCEEDINGS OF THE SCOTTISH OTOLOGICAL AND LARYNGOLOGICAL SOCIETY.

Meeting at the Royal Infirmary, Edinburgh, November 22, 1913.

Mr. J. D. Lithgow *in the Chair.*

Reported by Dr. W. S. Syme.

(*Continued from p.* 215.)

Peculiar Hyperplasia of the Mucous Membrane of the Uvula Soft Palate, Pharynx and Larynx.[1]**—A. Logan Turner.**

Dr. Walker Downie asked if, in the early stage, there had been any acute local inflammation. He had had a somewhat similar case in which the hyperplasia was preceded by a subacute inflammatory process associated with the formation of a fibrinous exudation, which persisted for many months. It was followed by marked contraction of the fauces, pharynx, and gullet.

Dr. Brown Kelly said this case further confirmed the existence of a condition which he had described a good many years ago. Since then Sir Felix Semon and Dr. Logan Turner had published similar cases, so that the affection seemed to be a distinct one. His case differed somewhat from those shown by Dr. Logan Turner. The striking feature in it

[1] See Journ. of Laryngol., Rhinol., and Otol., February, 1914, p. 57 *et seq.*

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was the size of the uvula, which was 1½ in. long, 1 in. broad, and very thick. After a portion had been removed the posterior wall of the pharynx presented in the middle a narrow track of normal tissue, and on each side a thick band which extended from the naso-pharynx to the entrance of the œsophagus. These bands, together with some thickening of the soft palate, reduced the naso-pharynx so that one could hardly introduce the forefinger, although the patient was a man of 6 ft. 2 in. The bands overhung the larynx in such a way as to hide the arytænoids. Dr. McBride and Dr. Logan Turner examined the patient and agreed that they had seen nothing like it previously.

Dr. ADAM, in 1905, before the Glasgow Medico-Chirurgical Society, reported a case of chronic œdema of the face lasting for two years in a patient aged twenty-two. The condition began with crusts in the anterior nares. The œdema involved the left half of the face, soft palate, uvula and inferior turbinals. After uvulotomy and turbinotomy, with the administration of thyroid gland substance the condition cleared up. Leucocytic infiltration of the parts removed was reported. He had seen the patient a few days ago, and there was practically no trace of the thickening of the mucous membrane. That case clearly showed that it was of infective origin. In Dr. Turner's case the patient said she had symptoms of crusting about the pharynx some eighteen months before she consulted him; so that there, too, there was a possibility of infection. One of Sir Felix Semon's cases also cleared up.

Dr. LOGAN TURNER replied that the question of myxœdema arose; there was something about the patient's appearance which suggested it. She was put on thyroid for three months but no change resulted. Dr. Adam referred to septic infection. In his (Dr. Turner's) first case, seen some ten years ago, the symptoms came on after an acute infection, so much so that the patient required tracheotomy. He had seen that patient a few days ago and he still had some of the appearances which he had several years ago, although his uvula and soft palate had returned to their normal. He was on vaccine for some eighteen months, and he attributed the clearing up of the soft palate to the vaccine, but it had had no effect on the laryngeal condition.

Multiple Telangiectases of the Skin of the Face and the Mucous Membrane of the Nose and Mouth.—A. Logan Turner.—Male, aged 59, a labourer, admitted on account of severe recurring epistaxis; attacks of nasal hæmorrhage during the last twenty years, becoming worse; the epistaxis is not so troublesome in the summer. No history of nose-bleeding in the family. No hæmophilic diathesis. No bleeding from mouth, bladder, or rectum. The telangiectases upon the face first appeared about forty years ago. They are not confined to the face, a few scattered points being seen over the scapulæ and on the skin of abdomen. At the anterior end of the nasal septum on each side there was visible clotting of blood and a slight superficial ulceration; the mucous membrane of the lips, inside of cheeks, tongue, and palate shows here and there minute vascular points and a little dilatation of capillaries. None of the points are raised above the surface. There are none visible in the larynx. The conjunctivæ are similarly affected.

Dr. BROWN KELLY asked if Dr. Turner was doing anything for the patient. Personally he had had two cases which he reported in 1906, one of them died of persistent hæmorrhage, and the other was in a state of chronic invalidism, and could not do anything on account of the bleeding from the telangiectases on the fingers. He had tried calcium

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salts, and the patient always thought they were somewhat improved thereby. For the telangiectases of the nose he did not think it was good to cauterise, but for specially large ones electrolysis with the needle as the positive pole was worth trying.

Dr. TURNER, in reply, said he had not thought of any treatment beyond the control of the epistaxis for which the patient was admitted. There was no heredity; this point was very carefully inquired into because in some of these cases there was a hereditary history.

Two Cases of Sarcoma of the Tonsil (shown at the meeting in November, 1912).[1]—**A. Logan Turner.**—In each case the tumour was removed by enucleation twelve months ago, and there is no evidence of recurrence.

Malignant Disease of the Upper End of the Œsophagus (removed by œsophagectomy in November, 1910).[2]—**A. Logan Turner.**—Mrs. B——, now aged forty, continues to enjoy good health.

Dr. TURNER said he had another case which had been operated on, where the upper end of the œsophagus was affected. They had had at least four of these cases operated on; they were at present treating an inoperable case in hospital with radium. A pharyngostomy was performed. The improvement was marked. The whole of the pharyngeal part had ulcerated away; the œsophageal portion was still under treatment. With regard to the case shown it was three years since Mr. Wallace removed a complete circle of the œsophagus 1½ inches in diameter. The patient was in excellent health, and she was swallowing by the natural route.

Symptoms similar to those observed with Paralysis of the Soft Palate following Removal of Tonsils and Adenoids.—A. Logan Turner.—E. L——, aged six, had her adenoids and tonsils (enucleation) removed two and a half years ago. Since that time liquids have occasionally returned through the nose, and in her speech there is evidence of insufficiency of the palate (rhinolalia aperta). He mother asserts this dates from the operation, and that there was no evidence of these symptoms prior to that time. Has the operation interfered with the proper elevation of the soft palate? On digital examination of the nasopharynx the soft palate feels tense across the finger. Probably congenital submucous cleft palate may be excluded. The case had been seen recently and was recovering.

Dr. SYME had a case of a child about a year ago who was brought back three months after operation with a history of fluids coming back through the nose, nasal speech and so on. He had advised that she would get all right. He looked upon it as a septic neuritis, just as one gets a neuritis after diphtheria. He had not seen the child again, and concluded she had recovered.

Otitic Meningitis; Translabyrinthine Drainage; Urotropin Injections into Spinal Canal; Recovery.—A. Logan Turner.—Girl, aged seven, chronic middle-ear suppuration (left) for five years. Polypus projecting from meatus; frequent pain, but no internal ear symptoms or signs. No vestibular tests carried out. Radical operation on October 20, 1913. Polypus attached in region of the windows;

[1] JOURN. OF LARYNGOL., RHINOL., AND OTOL., vol. xxviii, p. 161.
[2] *Ibid.*, vol. xxvii, p. 157.

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stapes not seen. No cholesteatoma. October 21 (noon): Temperature, 100·6° F.; pulse 120; frontal headache; nystagmus to both sides; marked to sound side. 6 p.m.: Temperature, 101°; slight neck rigidity; double Kernig; reflexes normal; leucocytosis, 7500. 8 p.m.: General anæsthesia; wound opened; cold caloric test for 2½ minutes; a few quick nystagmic movements induced to diseased side. Probe passed without opposition through oval window. *Lumbar puncture.*—Slight cloudiness of cerebrospinal fluid; faintly acid reaction; broad band of albumen; incomplete Fehling reduction. (Later, polymorphonuclear cells; Gram + diplococci; no growth on culture.) Double vestibulotomy, removal of promontory, and internal auditory meatus opened; free flow of cerebrospinal fluid; no drain inserted. No pus seen in labyrinth. The partial obliteration of external canal and lower cochlear whorl observed indicated old healed labyrinthitis. *After-history.*—Child very ill at times; temperature and pulse varied (charts exhibited). Cerebrospinal fluid would drain freely for two or three days, then stop and again flow. During cessation child always worse. Lumbar puncture and urotropin injections on October 23, 27 and 31, and November 1 and 6. Cerebrospinal fluid remained under pressure, turbid, and with excess of polymorphs, without growth of organisms during this period. Temperature rising as high as 103°, with pulse, 140. Temperature normal since November 7, and patient bright, eating and sleeping well.

Dr. Turner replied that it was unfortunate that the case was post-operative meningitis, and also that the labyrinth had not been investigated prior to operation. He was sure, however, that the child's life was saved by the prompt measures taken; the meninges were drained within thirty hours of the operation. The way in which the patient became worse when the fluid ceased to flow through the labyrinth and again improved with the restarting of the flow was very instructive. The organisms from the cerebro-spinal fluid did not grow on culture. It was not a very malignant type of meningitis. With regard to the urotropine, only 10 grains were given in the case of a child, but 30 and 40 grains have been injected in these meningeal cases, and it was stated by Flexner and others that there was no use giving it unless by injection.

Calculus of the Tonsil.—J. Walker Downie.—(*a*) Man, aged forty-five; no history of gout or rheumatism. He had had frequent attacks of peritonsillar suppuration, and when seen he had an ulcerated area over the right supra-tonsillar area which was caused by the pressure outwards of a calculus. This was extracted at this place. The surface of the calculus is comparatively smooth and hard, and resembles a well-formed phosphatic urinary calculus. Calculus shown.

(*b*) Man, aged fifty-seven, had had many severe and prolonged attacks of gout. History of frequent sore throat, chiefly on left side, but no history of suppuration. He was referred to exhibitor on account of a somewhat painful swelling of the left side of the soft palate immediately above the tonsil, hard to the touch. It was feared it might be malignant. Under local anæsthesia an incision over the swelling exposed a large hard calculus. This was removed by means of a steel spoon extractor. Calculus shown.

Among other exhibits **Dr. W. G. Porter** showed a **Series of Skiagrams illustrating the Anatomy of the Mastoid Region.**

Dr. Turner remarked that there was one point which he thought would be settled, namely, that the mastoid cells did not pass beyond the

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sutures. They had examined more than 500 skulls in the last month or two and had never yet found a case, even where the mastoid cells were widely distributed. Statements in text-books were made to that effect, but they had never seen it.

Dr. SYME remarked that what Dr. Porter gave with one hand he took away with the other. If there were many cases of asymmetry, the value was taken away.

Dr. PORTER replied that that was one of the points under investigation.

Dr. J. D. Lithgow: Convenient Form of Steel Wire Saw for the rapid and safe removal of the "bridge" in the radical mastoid operation. Patient and specimen shown in illustration of the use of the instrument.

Dr. FRASER said he did not feel inclined to try steel wire. He thought otologists had very wisely given up Stacke's protector and should not take to passing wire through the meatus. He thought the most important part of the radical operation was the integrity of the oval window and stapes; there was distinct risk of injury to the stapes.

Dr. LITHGOW said it would be used where the tympanic membrane was largely wanting. As the wire was held 2 or 3 in. from the end, the bending of the wire to the slightest obstruction would indicate whether one were using undue pressure or not. By its use about ten minutes might be saved. The method was employed by von Stein.

Dr. SYME did not think it should go forth that otologists had given up Stacke's protector. Those who had never used it could not give it up. Personally he always used it and knew others who did so too. The same thing was said in one of the medical papers and brought forth a letter in the *Lancet* or *British Medical Journal*. He had never seen any damage caused by the introduction of Stacke's protector. He introduced it from the antral side.

Dr. TURNER said that they had not used Stacke's protector in Edinburgh for some years.

INTERNATIONAL CONGRESS OF MEDICINE.

London, August, 1913.

SECTION XV.—LARYNGOLOGY.

SIR STCLAIR THOMSON, *President, in the Chair.*

Abstract Report by DAN MCKENZIE.

(*For President's Introductory Remarks*, see JOURN. OF LARYNGOL., RHINOL., AND OTOL., vol. xxviii, p. 565.)

Discussion on the Recent Progress of Endoscopic Methods as Applied to the Larynx, Trachea, Bronchi, Œsophagus and Stomach.

Report by PROF. GUSTAV KILLIAN (*Berlin*).

The Direct Method in the Years 1911 and 1912.

After a few introductory remarks, PROF. KILLIAN went on to speak of:

Direct Laryngoscopy.—The difficulties of anæsthesia in little children were avoided by Jackson, who used no general anæsthesia at all in early

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life. Several instruments had been devised by which simultaneously an anæsthetic could be given and the examination made.

Position.—The speaker preferred, in children, the lateral position, which materially facilitates the introduction of the spatula. The surgeon stands in front of and not behind the patient. One may begin with the head straight or inclined somewhat backwards.

Congenital stridor in children has been investigated by the direct method, but more investigation is required. The epiglottis has been seen to be aspirated into the larynx and the same has been observed of the arytænoid region. The speaker suggested that the stridor might be primarily a neurosis related to irritative glottic spasm. In laryngismus stridulus the vocal cords are approximated during inspiration.

Singers' nodes have been successfully treated by the direct method. But the greatest use of direct laryngoscopy has been seen in the treatment of laryngeal papilloma in children. Two distinct varieties are described: one circumscribed and easy to treat, and the other diffuse, recurrent, and often incurable.

Brünings has been trying the effect of the X rays in laryngeal tuberculosis, but the practical difficulties were great and the results inconsiderable.

In those cases in which the prolonged wearing of a tracheotomy tube is necessary direct laryngoscopy has proved of service in disclosing the cause of the obstruction and in leading to rational treatment. Adhesions following intubation have been divided, granulations removed, and stenoses dilated by rubber tubes, etc.

The mistaken diagnosis of diphtheria for a foreign body and *vice versâ* may be cleared up by direct examination, and finally foreign bodies are easily removed from the larynx by the direct method.

Suspension laryngoscopy is of special value in the treatment of laryngeal papilloma in little children, and it is of great service in the treatment of laryngeal tuberculosis. In carrying out the examination the base of the tongue should first of all be raised, and then with a special elevator the epiglottis is raised up and the interior of the larynx reached. Counter-pressure on the cricoid brings the anterior commissure into view.

Upper and Lower Tracheoscopy.—A congenital diverticulum of the trachea has been described, and stenosis from fracture. Bleeding from dilated veins on the posterior wall of the trachea has been successfully combatted with chromic acid.

Membranous bands following diphtheria and scarlet fever have been found causing tracheal obstruction, and attention has been drawn to the advisability of direct examination of the trachea when tracheotomy fails to relieve respiratory obstruction.

Our knowledge of syphilis of the trachea has been extended, tracheal gummata and ulcerations having been observed, the latter sometimes being very extensive, with perforation, in some instances, of the œsophagus and aorta. These ulcerations often lead to stenoses.

Scleroma affecting the trachea has been seen as far as the carina with consequent narrowing of the lumen of the bronchi.

Of neoplasms, papilloma and enchondroma have been observed, and enlarged glands outside the windpipe have been found causing troubles such as compression and ulceration into the tube, and from the same cause the trachea may be displaced. Cancer of the trachea, both primary and secondary, has been noticed.

Of foreign bodies, some sixty-five cases have been recorded; in most

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of them extraction was successfully accomplished. Among them was a case in which a piece of the pharyngeal tonsil had found its way into the trachea during general anæsthesia.

Upper and Lower Bronchoscopy.—For the examination of little children the avoidance of subglottic œdema necessitates the use of narrow, fine-walled tubes without any inner tube. Introduction is cautiously effected through the subglottic space with the aid of a hollow mandrin. A small accessory tube is sometimes supplied for the administration of the anæsthetic. As in direct laryngoscopy the passage of the bronchoscope under general narcosis is most easily carried out when the patient is lying on his left side. The bronchoscope may also be passed through the laryngeal spatula.

Bronchial bleeding, from wounding by a foreign body, has been observed and successfully treated with adrenalin. Chronic bronchitis has been combatted by the direct application of sprays, etc., and syphilitic lesions similar to those already described as occurring in the trachea have been found. Dilatation of bronchial stenosis has been undertaken with benefit.

Fibroma and carcinoma of the bronchi, the latter in a girl, aged twenty-three, have been reported.

Like the trachea, the bronchi are occasionally compressed by anthracotic mediastinal glands, and cases have been described in which calcification of these glands has led to the expulsion of "lung-stones," and in one case anthracotic glands surrounding the trachea and bronchi were successfully removed by mediastinotomy.

Tuberculous mediastinal glands behave in a similar fashion, and occasionally when they break down rupture into a bronchus.

A remarkable communication (Kahler) on auricular compression of the left bronchus has been described. Dilatation of the left auricle pushes the left bronchus further laterally and may even cause it to bend sharply, since the bronchus lies on the left auricle as on a cushion.

Foreign Bodies in the Bronchi.—Too many patients are still allowed to die from the effects of foreign bodies in the bronchi; both acute and chronic pulmonary disorders may occur and a foreign body never be suspected. X-ray examination is often negative even when the foreign body is metallic.

Of those cases in which extraction has been attempted the great majority recover. Most cases occur in children, the youngest on record being three months old. Most come for treatment early, but sometimes months and even years are allowed to lapse before removal is attempted.

Of all foreign bodies beans and similar seeds, etc., are the most dangerous. Out of twelve such cases five died. In the case of beans *tracheotomy should always be performed* before the examination is attempted, and *lower bronchoscopy* resorted to unless the case is brought for treatment *within a couple of hours* after the aspiration.

The mortality of foreign bodies in the bronchi removed by *upper bronchoscopy* is now between 8 per cent. and 9 per cent. In the "laryngoscopic period" the mortality was 30 per cent., and before that 52 per cent.

Of dangerous sequelæ, subglottic œdema, pneumonia and lung abscess were mentioned, together with one case of pneumothorax after a difficult extraction. It recovered.

Lower Bronchoscopy for Foreign Bodies.—Tracheotomy has proved a necessity in cases in which the foreign body was too large to be removed through the glottis.

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The mortality is 11 per cent.—double that of upper bronchoscopy, because of the more difficult cases being tackled by this method. The mortality of both methods taken together is 10 per cent.

Asthma.—Of recent years the treatment of asthma by the spraying of cocaine and adrenalin into the bronchi has taken a great swing upwards. Ephraim uses a curved tube so as to avoid the frequent introduction of the (straight) tube. It can be introduced into the right or left bronchus by altering the position of the body. Ten to 15 drops of a 1–1000 sol. adrenalin (adults) are sprayed into the bronchi. From his own experience the speaker could warmly recommend the treatment. Permanent results had been obtained in a considerable percentage of cases.

Pulmonary disease, even when acute, does not contra-indicate bronchoscopy, as the experiences in the removal of foreign bodies have shown.

Neoplasms of the lung are commoner than is supposed; most of them originate in bronchi. Carcinoma, endothelioma and an amyloid tumour in the neighbourhood of the bifurcation have been described.

Œsophagoscopy.—Deaths: The mortality of the simple examination seems to be about 1 per cent.

Instruments: Allusion was made among others to the use of instruments for dilating the gullet for the removal of large foreign bodies.

Disease of the œsophagus: Much still remains to be done as many conditions known to pathologists have not yet been examined with the œsophagoscope. For example, œsophageal hæmorrhage is not invariably due to disturbances in the portal circulation. Simple erosion may induce severe bleeding.

Gangrenous ulceration has been found in scarlet fever, and it is suggested that this may be followed by stenosis.

Abscesses of the gullet have been found and opened from within.

Little is known about syphilis of the œsophagus. It may set up changes which are mistaken for cancer. Gummata and fistula formation into the trachea have been recorded.

Of tumours, simple polypus and myxoma have been found. But cancer is of course the most common neoplasm. Of Guisez's cases three fourths were malignant. Ulcerating, proliferating and infiltrating forms have been described as the types of the disease. Proof-excision of carcinoma of the cardia was followed in one case by fatal peritonitis. The use of radium and mesothorium has been followed by considerable benefit, and highly situated carcinoma has been successfully removed by operation.

Simple stenosis of the œsophagus is often difficult to account for, but some cases are perhaps legacies left by scarlet fever and diphtheria in childhood or it may be due to smallpox or syphilis.

Congenital atresia of the œsophagus has often been described, but it has not often been examined with the œsophagoscope. Lubliner, however, has done so in a child two days old. Stenosis may follow œsophagoscopy, especially when cauterising agents penetrate deep into the tissues.

Regarding the treatment of œsophageal stenosis the speaker warned against internal œsophagotomy, which has led to death on several occasions. The best results seem to have been achieved with the aid of a swallowed string after gastrotomy, olives and bougies being passed up and down under its guidance.

Mention was also made of the spasmodic contraction of the upper and lower ends of the œsophagus, and of compression stenosis by goitre, mediastinal tumours, etc. As a rule, narrowing of the lumen, whether temporary or permanent, is associated with dilatation of the segment of

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the œsophagus above the stricture; this applies to spasmodic as well as to organic stricture, and stricture at the cardia may lead to enormous distension above it. In this condition treatment by dilators leads to cure.

Several cases of traction diverticulum have been examined. Removal was attempted by operation in one case, with death from mediastinitis.

Foreign Bodies in the Œsophagus.—The speaker emphasized anew the danger of blind attempts at removal, and expressed the opinion that manipulation through the œsophagoscope was not everybody's business.

A large number of cases have been recorded, in patients whose ages vary from four days to ninety-two years, in most of which extraction was successful. The œsophagus does not tolerate foreign bodies as the air-passages do, for this reason few long-standing cases are on record. Ulceration and mediastinitis develop, and fistula may open into the trachea or the aorta may be punctured. Rough or blind efforts at removal may also inflict serious injury. But those cases are quite rare. If extraction is impossible œsophagotomy may be necessary.

When the œsophagus is narrowed, stenosis may lead to retention of a foreign body which would otherwise be small enough to pass.

Gastroscopy.—The number of cases examined in this way is still limited. Chevalier Jackson's, Elsner's and Hill's instruments were described in detail. It is unfortunate that those who take special interest in gastric diseases do not adopt gastroscopy. It is questionable whether the future will show much change in this respect.

(*To be continued.*)

CLINICAL CONGRESS OF SURGEONS.

London, 1914.

This International Congress of Surgeons will be held in London, beginning July 27, 1914.

The headquarters of the Congress will be at the Hotel Cecil, with headquarters for the division of surgical specialities at the Savoy.

Arrangements have been made to furnish visitors with ample opportunities of becoming acquainted with the work of the different London hospitals, general and special.

There will also be sessions on each evening of the week, excepting Saturday, at which distinguished British, American and Continental surgeons will present papers dealing with subjects of present-day surgical interest. The Presidential Meeting occurs on Monday evening at the Cecil, at which time the newly-elected President, Dr. John B. Murphy, will deliver the annual address.

The session in the ball-room of the Savoy on the Tuesday evening will be devoted to the surgery of the nose and throat, as follows:

Prof. E. Schmiegelow, Copenhagen, Denmark, "The Result of Operations (Laryngo-fissure) for Cancer of the Larynx." Discussion by Sir StClair Thomson, London.

Dr. J. M. West, Berlin, Germany, "The Intra-nasal Surgery of the Lachrymal Apparatus, after an Experience with over 225 Operations." Discussion by Dr. D. R. Paterson, of Cardiff.

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On the Wednesday evening, in the same room, the papers will deal with otological subjects, as follows:

Dr. A. Logan Turner, Edinburgh, "The Application of Skiagraphy to the Mastoid Region and its Use in the Detection of Disease." Discussion by Mr. Sidney Scott, London.

Mr. Hugh E. Jones, Liverpool, "Some Considerations which Determine the Extent of an Operation in Septic Invasion of the Lateral Sinus." Discussion by Mr. Hunter Tod, London.

The London Committee of Arrangements is composed of one representative from each of the hospitals which are co-operating, Sir Rickman J. Godlee, Bt., honorary Chairman, Mr. H. S. Pendlebury and Mr. Herbert Paterson, honorary secretaries. The Secretary-General of the Congress is Dr. Franklin Martin, 1, Wimpole Street, W.

Abstracts.

PHARYNX.

Mayer, E. (New York).—Primary Carcinoma of the Epiglottis, with Report of a Case operated on by means of Suspension Laryngoscopy. "Arch. für Laryngol.," vol. xxvii, Part III.

After referring to the literature of this somewhat rare condition, the writer describes a case in which he met with a very early cylindrical-celled cancer of the laryngeal surface of the epiglottis. That the disease was of recent origin was certain because the writer had examined the patient's throat three weeks previously, and had found it normal. In suspension laryngoscopy under general anæsthesia the epiglottis was seized with catch-forceps and amputated with a knife. There was little bleeding at the time, but a quantity of blood was expectorated twenty-six hours later, the hæmorrhage, however, ceasing on the application of cold. The patient remained well at the time of writing (eight months after the operation). It is claimed that this was the first operation of the kind performed by means of suspension laryngoscopy.

Thomas Guthrie.

Jolly, R. H. H.—A Case of Osteomyelitis of the Sphenoid Bone following Removal of Adenoids. "Lancet," June 21, 1913, p. 1734.

A boy, aged fifteen. Adenoids and tonsils removed seventeen days previously. Considerable hæmorrhage four days later, with slighter loss each succeeding day. Severe headache one week, swelling of eyelids one day. Temperature 102°–105° F. Pulse 140, respirations 56. A rigor occurred shortly after admission, followed by coma and death in four days. There was purulent meningitis, pus in the sella turcica and at the back of both orbits. The entire body of the sphenoid was broken down and caseous, with small foci of pus, a definite connection being traceable to the posterior naso-pharynx. Cavernous sinuses contained purulent thrombi. Tonsillar fossæ fairly normal, but the upper part of the posterior naso-pharynx was full of foul, purulent slough.

Macleod Yearsley.

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