fold on the posterior wall, probably the result of the pressure of the tracheotomy tube. The hard swelling had also disappeared outside the trachea, but the skin itself was still slightly reddened and thickened over the seat of the lateral incision.

The patient has been inspected several times since, and up to the present—six months later—there has been no return of the growth. A slight puckering of the trachea anteriorly can be seen by Avellis' method, marking the site of the tracheotomy wound.

For some time subsequent to the operation she was submitted to X-ray irradiation at weekly intervals, and all thickenings of the skin at the root of the neck have now disappeared, leaving it soft and pliable.

PATHOLOGICAL REPORT.

Microscopical Appearance of the Growth.

For the most part it consists of masses of round cells of small medium size, freely supplied with small blood-vessels. This structure persists right up to the epithelium, which is intact and not materially altered.

I should describe it as a round-celled sarcoma, assuming that the patient is not suffering from leukæmia, lymphocythæmia, or Hodgkin's disease, which are all capable of causing a deposit of this type.

Examining the section again in the light of the above clinical history, and considering the possibility of the growth being a chronic inflammatory infiltration, I should decide that if it is inflammatory it is syphilitic.

Another pathologist to whom the section was submitted, pronounced it an epithelioma.

The Wassermann test subsequently done proved to be negative.

SOCIETIES' PROCEEDINGS.

ROYAL SOCIETY OF MEDICINE—OTOLOGICAL SECTION.

President: Mr. H. J. MARRIAGE *in the Chair.*

Cerebro-spinal Fluid Escaping from the Ear for Twelve Months.—**J. F. O'Malley.**—Driver E. R——, aged twenty-seven, came under my care seven months ago, with the following history: He stated that he underwent a mastoid operation, performed by Dr. Paterson, of Cardiff, about ten and a half years ago. The result was excellent for about six years, when a polypus formed and was removed. After this he emigrated to Australia, and during his two years' residence there he had polypi removed twice. About eighteen months ago he had a polypus removed at Nottingham, and the ear began to drip soon after, the escape of fluid being worse at night.

When he came under my care early in September, 1916, the condition of his ear was as follows: There was a free flow of watery fluid dripping from the lobule of the right ear and escaping from the external meatus.

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The meatus was completely blocked by a smooth cyst-like swelling, which, if examined hurriedly, would be easily mistaken for a polypus. It was the scar tissue lining of the mastoid cavity, raised by the cerebro-spinal fluid from the bony facial ridge and antral cavity. There was some pus in the meatus also. After keeping him under observation for about a week, and getting the meatus as free from pus as possible, I decided to re-open the mastoid and clear out the old scar tissue and the focus which provided the pus. In doing so no difficulty was encountered, but I was unable to localise the bony defect, though I formed the opinion then that it was in the promontory. The operation cavity was packed with sterile gauze soaked in iodoform emulsion and the usual dressings applied. These were all soaked through next day by the cerebro-spinal fluid, and had to be replaced. The same condition was found on the second day and also on the third, but as he complained of discomfort all dressings were removed, when the mastoid skin wound and the whole operation cavity was found profusely bathed in pus. The cavity and wound edges were now cleaned twice daily with 40 per cent. rectified spirit and loosely packed with ribbon gauze wrung out of this solution. A material improvement set in in a few days, but the cerebro-spinal fluid continued to soak through the dressings for six weeks. As the cavity was now almost free from pus, I dusted in a little boric powder and packed it very firmly with sterile gauze each day. I was now able to localise the point from which the fluid escaped very definitely—namely, the posterior part of the attic, near the aditus. The escape of fluid gradually diminished, but even as late as December 28, 1916, that is, about three months after operation, 1½ dr. was collected in four hours. The leakage of cerebro-spinal fluid ceased early in January, 1917, and the mastoid wound and middle-ear cavity were soundly healed before this date, but the antral cavity has been slow to fill up and form a strong scar. It is still supported by a gauze packing inserted twice weekly, although the soldier has returned to light duty and is otherwise well. The degree of hearing in this ear is negligible, but the labyrinth responds to caloric tests.

The case seems to be of special interest for the following reasons:

(1) The large amount of cerebro-spinal fluid which a patient may lose over a long period without any apparent injury to health. I have estimated that he lost 1½ gallons in three months.

(2) The influence of the cerebro-spinal fluid in producing profuse suppuration in the mastoid cavity after operation.

Mr. C. E. West: This is an extraordinary case, both as to duration and the absence of any symptoms referable to the escape of the fluid, seeing the enormous total quantity of fluid which must have been lost. I have never seen a parallel case in which escape took place from that situation; but one is familiar with escapes of fluid through the internal auditory meatus after translabyrinthine drainage, and with cases of escape both from occipital drainage and after meningitis. Recently I have had two escapes from the lateral ventricle, but in none of them has the flow persisted beyond three weeks. It is difficult to see what could have been the cause of the prolonged escape in Mr. O'Malley's case. Was there any evidence of raised cerebro-spinal pressure? Apart from that, I can only conclude there was something in the nature of what ophthalmologists call a "filtration scar." One can scarcely conceive of there being a hole unfilled by tissue for a period of twelve months. Did the patient have headaches?

Mr. Sydney Scott: I am reminded of a similar condition in a girl whose right labyrinth I opened eleven years ago. Two or three years

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later she came to the out-patient room saying that on several occasions she had noticed "water" dripping from the ear. I found that fluid having the chemical characteristics of cerebro-spinal fluid dripped from her ear for about three days at a time. As it recurred I explored the mastoid cavity and discovered the fluid escaping, not from the labyrinth, but through the planes of dura mater of the middle cranial fossa, which had been exposed at various operations. Soon afterwards the flow stopped spontaneously, and had not returned when I saw the patient for the last time three or four years ago. These cases present certain features in common with those of cerebro-spinal rhinorrhœa which Sir StClair Thomson has described and collected. A few years ago a man was under my observation at the National Hospital for the Paralysed and Epileptic suffering from violent headaches, which were relieved by the spontaneous escape of cerebro-spinal fluid from the nose. This recurred repeatedly for over a year. I think Mr. O'Malley's case probably belongs to the same category.

Mr. RICHARD LAKE: The first time I removed a cochlea I took away the modiolus, and there was a free flow of cerebro-spinal fluid. As a result there was a great deal of irritation of the skin. I closed up the hole, after a fortnight, with a plug of wax. I wondered whether that might have any bearing on the cause of suppuration in the ear—namely, the irritation from this fluid. One would have thought the fluid was non-irritant.

Mr. H. BANKS DAVIS: One point which interested me very much was this. The note says: "The external meatus was completely blocked by a smooth cyst-like swelling, which, if examined hurriedly, would be easily mistaken for a polypus." A child I operated upon at the hospital four years ago went into one of the other departments. From there she was referred back to the aural department with the statement that she had a polypoid cyst at the back of the ear, and a request that it be removed. I did not see the case until after an attempt had been made to remove it in the out-patient department by means of the snare. They opened a cerebral hernia. It was scraped, and the child sent home. She was brought back unconscious a week afterwards, with a temporo-sphenoidal abscess and an abscess of the cerebellum. The child is now quite well, but only as a result of extensive operations. I think the posterior wall had been removed, and the brain had been sagging down into the meatus. I always think the removal of polypi in the out-patient room should be undertaken with very great caution.

Mr. O'MALLEY (in reply): I felt that I was dealing with a touchy condition, and I feared the onset of meningitis. My conclusion—if one can draw a conclusion from one case—is that the question of meningitis rests very largely on drainage. I did not begin the packing until I felt sure there was a considerable amount of granulation material. One should not immediately attempt to do firm packing in order to arrest the escape of the fluid; we should wait until there is a good covering of granulation tissue. If packing is then done, it provides a protection against infection. With regard to the profuse suppuration in the mastoid cavity after operation, it seemed very extraordinary to me, on opening the mastoid, to find pus pouring from the cavity. But nothing happened, and the man is now in far better health than at any period during the persistence of the discharge. Formerly he complained of headache and a languid feeling, but has not done so once since the flow has been completely arrested. Apparently, therefore, there is now no persistent pressure. The margins of the meatus look a little thin, and

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one might have supposed there was fluid near the surface, but I tested for that, and found none. To be quite sure, however, I still pack twice a week.

Objective and Subjective Ticking in the Ears.—W. H. Jewell.—V. G——, a girl, aged eleven. The ticking began in the ears three months ago, and could be heard at three yards' distance, but it is not so loud now. It ceases during sleep, swallowing, or deep pressure behind the angle of the inferior maxilla, is independent of the pulse-rate, but corresponds in number and is synchronous with the clonic contractions of the tensors and levators of the soft palate, which are 150 per minute. There is neither blepharospasm, nor any movement in the tympanic membranes, corresponding to the ticking discernible.

Squamous-celled Carcinoma of the External Auditory Meatus and Tympanum in a Young Woman aged twenty-two.—Sydney Scott.—The following is an account of a case of malignant disease which had extensively destroyed the external osseous meatus, while a portion of the growth had invaded the tympanic cavity without destroying its bony walls or ossicles. The patient was first seen on January 26, 1917, on account of deafness and purulent discharge from the right ear. The meatus was full of what looked like granulations and a band of scar tissue which bisected the meatus in the region of the isthmus. She stated she had had intermittent otorrhœa for many years, and that it had been continuous for the previous twelve months. A small swelling formed immediately below the meatus and developed into a subcutaneous abscess, which was opened on February 1. She had no pain, nor tenderness, nor facial paralysis, nor pyrexia. The deafness was moderate and of the ordinary middle-ear type. Slight dizziness had been complained of, but the labyrinthine reflexes were normal. The nose, pharynx, left ear, and cervical lymphatic glands were unaffected.

On February 8 the inframeatal sinus, formed by the opening of the abscess a week previously, admitted a probe upwards and inwards as far as the tympanum, as the subsequent operation proved, without encountering bony resistance. The patient agreed to submit to an exploratory operation, and on February 15 the mastoid process was opened and found to contain normal air cells throughout. The meatus was then opened from behind and a tough troublesome bleeding growth, which had spread through the floor of the meatus into the inframeatal tissues of the neck, was removed. The tympanic plate had been destroyed together with the lower part of the tympanic membrane, the upper half of which was intact, with the handle of the malleus projecting from it. The antrum was then opened and seen to contain more of the growth, which here looked like a polypus projecting backwards, but not completely filling its cavity. The incus was seen to be embedded in, but not destroyed, by the growth.

The operation was completed a week later, that is, on February 23, after the histological examination had proved that the disease was carcinoma (Prof. F. W. Andrewes). The limbs of the post-aural incision were extended to the temporal region and to the angle of the jaw, and the pinna, with the surrounding skin, was reflected forwards over the cheek. The whole of the mastoid process was removed, together with the fibro-cartilaginous meatus and concha, and all parts down to and including the tympanic ring, outer attic wall, tympanic membrane, auditory ossicles, and remains of the growth which occupied the tympanum. The stapes

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was left in position, likewise the labyrinth and facial nerve. Only a portion of the parotid salivary gland was removed with the main pre-auricular lymphatic gland, although this was not found to be involved. The wound was closed by suture in the usual way, and healing has taken place uninterruptedly since, but without the insertion of packing or skin grafts.

No operation for the removal of the cervical lymphatic glands has yet taken place, for it is difficult to get the patient to realise that any further operation would be likely to prolong her life or add to her future comfort.

Comment.—Apart from the patient's youthful age for carcinoma of the ear, the following features appear to be noteworthy:

(1) The total absence of pain while the disease was active.

(2) The apparently satisfactory extirpation of the growth.

(3) Its evident origin in the meatus.

(4) The question of the absolute necessity, or otherwise, of removing the lymphatic glands before they become obviously involved.

(5) The prognosis in comparison with other cases of carcinoma of the ear.

Mr. C. E. West: Carcinomata of the meatus represent a very much larger proportion of the total number of carcinomata which are reported as carcinomata of the middle ear than most people admit. That is a point upon which I have insisted on a previous occasion. The cases all have a strong family likeness. Most of them originate in the floor of the meatus, invade the tympanum, and penetrate downwards into the neck and towards the root of the styloid process. They are locally malignant. In my experience, they have rarely had any wide distribution as glandular involvement, and, generally, they recur. (I do not know about Mr. Sydney Scott's results, which, I believe, are better than mine.) The recurrence takes place along the line of the Eustachian tube and the base of the skull, and the patient dies of infection, or meningitis, or acute encephalitis. In some cases the patient has complete freedom for a long time—sometimes permanently—after a sufficiently bold operation. I have known a patient, after two years of freedom from disease, come back and die from recurrence. I also know a patient who has survived for nine years and passed through various accidents, and yet had no recurrence of his carcinoma. One patient must now be very old, if he is still living—and I have not heard of his death. I was interested to find Mr. Scott reporting this case, because only a week last Wednesday I operated on a case of squamous-celled carcinoma of the external auditory meatus at St. Bartholomew's Hospital, and it was unlike anything I have seen before. The patient, a woman aged fifty-four, came up a fortnight before the operation complaining of trouble, apparently furuncular, in the external and auditory meatus. It was incised. A week later the woman returned with the meatus full of a fungating growth. There was a fixed mass, about the size of a filbert-nut, below the meatus. The whole of the floor of the anterior wall of the bony meatus had been destroyed, and the growth in the meatus was continuous with that in the neck, where it went downwards $\frac{3}{4}$ in., and inwards practically as far as the styloid process. It had invaded the tympanum, but only in a polypoid way; there was no erosion of the bony walls of the tympanum. I did what I could in the region of the Eustachian tube and of the carotid canal. The points common to this case and Mr. Scott's are: The rapid growth, the destruction of the floor of the meatus, and the absence of any glandular involvement. The most important surgical question is, what should be done in

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the neck if one is satisfied that the primary growth has been cleared away? In my case I could not satisfy myself on that point. The patient was a stout and flabby woman, past middle age. What I believe is right in these cases is, if there are no palpable glands, do an ordinary clearance operation but leave the sternomastoid. If there are such glands, clear everything, including the whole length of the sternomastoid muscles, the floors of both triangles, if necessary the submaxillary and parts of the parotid salivary glands, the internal jugular vein, and the whole of the overlying lymphatic structures, in a single sheet, and if possible without seeing the surface of any lymphatic gland. This method gives very good exposure, and there is astonishingly little loss of function. In one case so treated, you would not know that he had lost anything in the way of function in the neck and shoulder. You can be fairly certain, not quite, that there will be no glandular recurrence in the neck.

Mr. W. M. Mollison: One explanation of the absence of pain while the disease was active may be, that pain in these cases is due solely to the pressure exerted by the growth when in a closed cavity.

Mr. Sydney Scott (in reply): I do not remember any case of malignant disease of the ear free from recurrence for more than four years, except the case of rodent ulcer, but my experience is limited to twenty-one altogether. [The President: Were the twenty-one all carcinomatous?] They include two of rodent ulcer and four of sarcoma. An interesting point concerns the site and direction of recurrent growth, which is nearly always *in situ*, and locally very malignant. I find the disease invades the temporal fossa or involves the cervical region, and the logical procedure in the former case would be, to excise the temporal muscle, the temporo-mandibular joint, and part of the mandible-like, but I have not seen a case which justified this being done. I have, of course, removed the sternomastoid completely with the glands of both cervical triangles, but I feel uncertain whether to practise this as a routine, for the disease does not always follow this downward direction.

Mr. C. E. West (answering Mr. Scott): I should leave the patient alone, watching the condition of the cervical glands very carefully. If they begin to be palpable, there will be still time to clear the neck.

Another Case of Translabyrinthine Drainage for Streptococcal Lepto-meningitis, with Recovery.[1]—**Sydney Scott.**—The patient, G. G——, is a governess, aged twenty-four, who suffered from chronic suppurative otitis media, which had already been treated by the radical mastoid operation on each side, before she came under my observation in May, 1916, when the following history was obtained.

History: Intermittent bilateral otorrhœa and deafness began in childhood. Two years ago the left ear was treated by the radical mastoid operation by Mr. Muecke. Four months ago the right ear became painful and discharged, and six weeks later, the radical mastoid operation was done on this side by Mr. Badgerow. The earache and discharge subsided, but the patient continued to complain of headache, dizziness, vomiting, and very loud tinnitus. She developed neurasthenia, with insomnia, and was profoundly depressed mentally and showed determined suicidal tendencies. She had to be constantly watched, and, nine weeks afterwards, was examined by Dr. Hinds Howell, who was able to exclude disease of the central nervous system. A fortnight later Mr. Badgerow asked if I would take her under my care.

[1] The above is an almost parallel case to one recorded in the *Proc. Roy. Soc., Med.*, 1913, vii (Sect. Otol.), p. 4 and to another recorded in *ibid.*, ii, p. 11.

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Condition before Exploration.—It was at this period (May 11, 1916), I noticed a slight internal squint of the right eye with right facial weakness, but in view of Dr. Howell's recent report this was not to be attributed to a ganglionic lesion. There was no spontaneous nystagmus or Rombergism, though the patient walked with apprehension. At this time the right mastoid-meatal cavity was occluded by scar tissue, *pressure on which caused vertical nystagmus downwards, with forced movements of the head and trunk backwards and to the right.* This "fistula symptom" was therefore unlike that usually met with in fistula of the external semicircular canal, or in the case of an unduly mobile stapes.

HEARING TESTS.

	Right.		Left.
Low tone range limit (Bezold)	55 d. v.		90 d. v.
High tone range limit (steel monochord	36 cm.	(Air)	36 cm.
	16 „	(Bone)	16 „
Rinne		Negative	
Weber		Doubtful	
Schwabach		Confused by tinnitus	

Raised voice was heard and understood on both sides.

In face of the risks I agreed to explore the right ear, and on the morning of May 17, 1916, I reopened the mastoid and tympanic cavities, removed the dense tissue and new bone which encroached upon the tympanum and meatus, and obtained a satisfactory exposure of the inner tympanic wall. No fistula either of the external semicircular canal or of the oval window was discernible, neither could any opening be discovered with the fine flexible probe. There was some erosion of the posterior part of the promontory of the cochlea, and of the Fallopian aqueduct, but the fossula rotunda was unrecognisable. I thereupon left the labyrinth alone. Next morning (May 18) the tinnitus was the same as ever, and *spontaneous nystagmus* now appeared for the first time, being directed to the left (there was no nystagmus the evening after the operation), so it seemed evident from the direction and time of onset of the nystagmus that the labyrinth was becoming in some way involved. The giddiness also increased, and any movement of the head provoked vomiting, the facial paresis was more marked. On May 19 I awaited events; the evening temperature rose to 102°·2° F., and the pulse-rate to 110. Next morning (May 20) the temperature had fallen to 99° F., and the pulse-rate to 76, suggesting an improvement, but there was now definite cervical rigidity; Kernig's sign was obtainable, while the tendon reflexes were diminished though not abolished. Moreover, the cerebro-spinal fluid, which was now withdrawn by lumbar puncture, was found to be already "cloudy" (a later report by Dr. Stansfeld stated that it contained an excess of polymorphonuclear cells and yielded a pure growth of streptococci on cultivation).

Labyrinth and Internal Auditory Meatus Opened.—After withdrawing 20 c.c. of cerebro-spinal fluid the vestibule and cochlea were opened through the meatus, without disturbing the sutures of the mastoid incision, and with a narrow gouge a free communication was established between the vestibule and internal auditory meatus, through which cerebro-spinal fluid escaped freely and continued so to do for several days.

The improvement which followed was rapid and continuous: in twenty-four hours the headache and cervical rigidity had disappeared; the cerebro-spinal fluid, withdrawn daily by lumbar puncture, was under less pressure, only 7 c.c. being collected, and this was "less cloudy," and in seventy-two hours was clear. The temperature returned to 98° F. and

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pulse-rate to 80, no subsequent rise taking place. The patient left the hospital in three weeks, and at first experienced the usual phenomena following ablation of one labyrinth. The facial paresis and internal strabismus disappeared two or three weeks afterwards, but the tinnitus remained loud and persistent, quite unchecked by the operation for fully two or three months; subsequently it gradually ceased to trouble the patient, who in the meantime had become cheerful and well.

Note.—The purpose of recording this case is to emphasise the importance of *early diagnosis* of lepto-meningitis, and at the same time the value of *immediate drainage* of the meninges through the labyrinth, when the signs indicate that this has been the route of infection, just as was shown in the case which I first described in the *Archives of Otology*, 1908, xxxvii, p. 108.

Dr. DAN MCKENZIE: As in this successful case, I also have been able to rescue several patients from the jaws of death by this and other means of draining the meningeal spaces. If the ease of the operation were better known, I think more men would be disposed to tackle cases of meningitis. Meningitis is regarded practically as a death-warrant, and so, often, nothing is done beyond a radical mastoid operation. But cases like Mr Scott's show how unjustiable it is to allow the patient to die without making an attemp to drain. I heartily support Mr. Scott's procedure in instituting prompt drainage when the diagnosis has been made; and now it is possible to make the diagnosis sufficiently early to save the patient in many cases. To decline to drain in meningitis is more ustifiable than to decline to open the abdomen in peritonitis.

Mr. W. M. MOLLISON: I do not agree with Dr. McKenzie. I prefer to treat these cases of lepto-meningitis not by draining to the internal auditory meatus, but by making incisions into the dura mater. These cases which I have saved have been saved in that way. I did not find opening the internal auditory meatus as easy as Dr. McKenzie suggests; possibly I did not use the right instruments. The facial nerve was always very worrying in such cases, and I found it very dangerous to establish really good drainage when I had got through. And I do not agree with Dr. McKenzie in opening through the meatus as soon as the diagnosis of meningitis is made, because so many of these early cases can be saved by continuous lumbar punctures; these—a trivial operation—during the first twenty-four hours may save the patient.

Mr. C. E. WEST: I agree, to some extent, with all the speakers. The operation of translabyrinthine drainage is a remarkably easy one. It takes a very brief time after finishing the radical mastoid operation, and in many of the cases efficient drainage can be readily established, which will last four or five days; in some cases it has lasted fourteen days. But only a small proportion of the meningitis cases I have treated in this way—or in any other way—recover One has had stray recoveries by all methods except in that of incision of the dura mater. I have incised the dura mater at various points. If nothing be interposed between dura mater and brain, the brain becomes adherent, and if gauze is interposed, it becomes infiltrated with lymph, and drainage ceases. When once withdrawn, it is impossible to put the gauze back. There are adhesions all round between brain and dura mater; in fact, I have carried out this procedure for the very purpose of establishing adhesions. I agree with Mr. Mollison that in early cases perhaps the simplest and most effective method is either continued thecal drainage or thecal lumbar puncture—both simple methods. After fairly extensive trial of every method of treating meningitis I have heard of, I am

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coming back to thecal drainage as being the most hopeful way of treating cases. This matter was discussed in our Section at the International Congress of Medicine, and the further I attempt to treat cases of meningitis, the more convinced I am that the real secret, as was stated on that occasion, is that the choroid plexus blocks out the antibody. There are practically no antibodies in the cerebro-spinal fluid, and until you can get a high antibacterial content in the cerebro-spinal fluid, either by introducing it mechanically, or as an antiserum, or by altering the permeability of the plexus, the great bulk of the cases of meningitis will be lost.

Mr. Somerville Hastings: The only cases of meningitis in which I have experienced recovery have been those treated by repeated lumbar puncture. I should like to hear from Mr. Scott whether, with a normal labyrinth, he considers it justifiable to do translabyrinthine drainage. I should also like to know something of the method Mr. West employs for continuous thecal drainage, because I have never done it, and I would like to try it.

Mr. C. E. West (replying to Mr. Somerville Hastings): The method of continuous thecal drainage is exceedingly simple. It consists of the introduction of a suitable trochar cannula into the theca in the ordinary position of lumbar puncture. It gives the most extravagantly profuse drainage. The end of the trochar comes out in the centre of a large rubber sheet, and over that are placed sterile sponges or swabs. Periodically the sheet is opened out and the sponges replaced.

Mr. Sydney Scott (in reply): In answer to Mr. Somerville Hastings, as mentioned in the note at the end of my case, it seems to me that the chief indication for draining the basal meninges through the labyrinth occurs when the meningitis is preceded by labyrinthitis, as is so frequently the case in otitic meningitis. When the patient is *in extremis* when first seen, I think it the right procedure whether one knows the labyrinth to be affected or not.

Abstracts.

BRONCHOSCOPY.

The Technique of Suspension in Bronchoscopy and Œsophogospy.—R. C. Lynch (New Orleans, La.). "The Laryngoscope," July, 1917, p. 533.

In children and infants Lynch has made use of his own suspension method and apparatus for introducing and manipulating bronchoscopic and œsophogopic tubes. Infants and young children are the most ideal subjects for suspension because of their muscular undevelopment, their flexible necks, and the short distance from the upper teeth to the larynx. It is in infants and young children that the greatest number of our foreign body cases occur, and it is in these also that we most fear reactive inflammation and swelling due to our manipulations. It is not uncommon for the surgeon to remove the foreign bodies successfully with the bronchoscope only to be called again to relieve the subglottic œdema by a tracheotomy. Peroral endoscopy is the procedure of election in infants and young children provided one has developed a technique which will

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