## Ear

In the X-ray Department.—By J. M. W. Morison, M.B., on "Cardiospasm and other Diseases of the Esophagus."

By E. W. Twining, M.R.C.S., L.R.C.P., on "Pirie's Method of Radiographing the Mastoid Cells."

By C. C. Anderson, M.B., on "Deep X-ray Therapy in Laryngological Conditions"; and

By A. Burrows, M.D., on "Methods of Application of Radium." (Cases shown.) (At the Radium Institute.)

#### ABSTRACTS

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#### A Case of Pedunculated Exostosis of the External Auditory Meatus. VALTER DAHLSTRÖM. (Acta Oto-laryngologica, Vol. v., fasc 2.)

The patient was a woman 26 years of age. The bony growth measured 10 mm. by 8 mm., with a pedicle 2 mm. in diameter, and was easily removed from its attachment to the lower and posterior aspect of the wall about 1 cm. from the meatal opening. The writer remarks that, although these growths are usually regarded as exostoses, their clinical course and slow growth suggest that they should perhaps be regarded rather as osteomata. In the case which he reports there was nothing to explain the origin of the growth.

THOMAS GUTHRIE.

#### The Significance of Retraction of the Tympanic Membrane. Professor S. CITELLI. (Revue de Laryngologie, November 1922.)

The writer comments on the number of cases examined by him showing marked retraction of the tympanic membrane, and increased obliquity of the handle of the malleus, without any Eustachian obstruction, and with little or no impairment of hearing. Further, in a number of cases of chronic tubal obstruction, he has found considerable improvement of hearing after inflation of the middle ear, though the retraction of the membrane and of the malleus has persisted. Citelli believes that this tympanic retraction is always a sign of former long continued Eustachian obstruction, and that the malposition of the malleus is due to a permanent contraction of the tensor tympani muscle, with some shifting of the head of the malleus in relation to the malleo-incudal joint. G. WILKINSON.

#### Two Signs of Ankylosis of the Stapes. E. ESCAT. (Revue de Laryngologie, October 1922.)

The first of these signs is a modification of the classical Gellé's test. It consists in getting the patient to observe the effect of Valsalva inflation of the tympanum on the perception of the sound from a high-pitched tuning-fork (a<sup>3</sup>) held in front of the auditory meatus. The sound is unaffected in cases of ankylosis of the stapes, but markedly diminished in loudness in other cases, provided the Eustachian tube is free.

Escat lays more stress on the second test, which he considers pathognomonic. A low-pitched tuning-fork is used. This is only slightly heard, or not perceived at all by air conduction, by the subject of ankylosis. When the butt of the fork is applied to the mastoid, a reflex contraction of the facial muscles of the same side, and particularly of the orbicularis palpebrarum is excited, with a shrinking movement of the head. The reflex is absent in the normal subject.

G. WILKINSON.

#### Circumscribed Suppuration in the Mastoid Process. W. KÜMMEL. (Acta Oto-Laryngologica, Vol. v., fasc. 2.)

Kümmel reports three cases of acute mastoid disease in each of which there was an isolated group of suppurating air cells completely separate from the remaining cells, the latter being normal or showing only very slight changes. In all the cases the clinical signs and symptoms clearly indicated the presence of pus in the mastoid. At the operation, however, this at first appeared to be absent, and the focus of disease was found only after prolonged search—in one of the cases at a second operation.

It is interesting to enquire how an isolated group of cells can show advanced disease while the rest of the mastoid is almost normal. Kümmel believes that this may be explained by the observation of Wittmaack, that while the greater part of the air cells is developed from the antrum, some arise from the sinus tympani, and the two groups have no direct communication with one another. In the first two cases, and probably also in the third, the disease seems to have involved only cells developed from the sinus tympani, the cells of antral origin remaining free from disease.

The condition is one which may entail considerable risk for the patient, as the cells originating from the sinus tympani are sometimes in close apposition to the lateral sinus, and, the rest of the mastoid being apparently normal, are easily overlooked. In cases of this kind a characteristic feature is bulging of the posterior *inferior* portion of the tympanic membrane with a small perforation on its summit,

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while in ordinary cases of disease of the cells of antral origin the bulging usually involves the posterior superior quadrant.

In some cases of persistent suppuration after the radical operation for chronic disease, the explanation probably lies in disease of unopened "sinus tympani cells." THOMAS GUTHRIE.

#### Hardness of Hearing in School Children. F. LEEGAARD. (Acta Oto-Laryngologica, Vol. v., fasc. 2.)

The author, who has held for two years the post of Aural Surgeon to the School Medical Service of Christiania, gives a detailed account of the organisation of his department, the methods of examination and the conditions found in the 7,700 children who have passed through his hands. His results show the necessity of a systematic examination of all pupils attending elementary schools, regardless of whether the teaching staff have noticed any defects or not, otherwise cases of serious loss of hearing will be overlooked. He considers it especially important that all pupils who, on account of their poor abilities, are marked for transfer to the mentally defective school, should be submitted to a hearing test, before transfer takes place. A considerable number of such children are really of average intelligence but more or less deaf, and should be transferred to a "hard of hearing" school. The paper is a long one, containing much statistical detail. It indicates the valuable nature of the work which has been carried out in Christiania since the year 1919.

THOMAS GUTHRIE.

#### Acute Otitis Media with Jugular Bulb Thrombosis. E. WATSON WILLIAMS. (Brit. Med. Journ., 16th June 1923.)

In a case of double otitis media there were severe systemic symptoms, but no definite signs of mastoid involvement. The occurrence of a rigor, however, necessitated exploration, and a small collection of mucoid pus was found in the antrum. The upper part of the sinus was exposed and found to be healthy, containing fluid blood. Another rigor, three days later, led to exploration of the jugular vein which was normal. The sinus, however, now contained recent clot, and exposure downwards discovered a small perisinus abscess superficial to the sinus and close to the bulb. Recovery took place. The author thinks the bulb was probably infected through the floor of the middle ear. T. RITCHIE RODGER.

#### The Indications for Operation in Labyrinthine Cases. Dr GEORGES PORTMAN. (Revue de Laryngologie, February 1923, and Discussion of Paper, Ibid., 30th November 1922.)

This communication was read and discussed at the Tenth International Congress of Otology in July 1922. The introducer summed up the indications for operation in a cautious and conservative manner. In the discussion which followed, an interesting pronouncement was made by F. H. Quix (Utrecht). He is of the opinion that most cases presenting Ménière's syndrome are the subjects of localised increased intracranial pressure in the posterior fossa, and that if any operation is performed for the relief of unbearable vertigo, it should be a decompression trephining behind the mastoid. Dr Aboulker stated that he had performed this operation in three cases with complete and immediate relief of the vertigo. G. WILKINSON.

#### Case of Tumour of the Cerebellum that gave Negative Results to Tests of the Labyrinth and Labyrinthine Tracts. Dr ROSENBLUTH. (Laryngoscope, Vol. xxxiii., No. 4.)

A case of tumour of the cerebellum in a boy aged 10 is reported. The onset was acute, and the symptoms noted were (1) falling to the right and backward; (2) slow pulse and vomiting; (3) diadokokinesis of the right upper extremity; (4) internal strabismus of left eye; (5) crying out aloud, and at times drowsiness; (6) slight facial paresis on the right side.

On the other hand, no nystagmus was observed and the fundi were normal; Wassermann negative. There was no spontaneous pastpointing, and the labyrinthine tests (turning and caloric) gave perfectly normal results as regards nystagmus, vertigo and pastpointing. The post-mortem examination revealed a small cauliflower-like mass growing from the superior vermis, projecting anteriorly and invading the superior peduncles nearly as far as the quadrigeminal bodies. There was no lesion of the right cerebellar hemisphere. Microscopically the growth was a large spindle-celled sarcoma. No operation was performed. ANDREW CAMPBELL.

#### PHARYNX.

#### Unhealthy Tonsils associated with Cervical Adenitis. W. G. HOWARTH and S. R. GLOYNE. (Lancet, 1923, i., 1202.)

The authors detail their further research since the publication of their first paper in the *Lancet* nearly two years ago. Their results are as follows: In enlarged and unhealthy tonsils associated with  $6\pi^2$ 

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cervical adenitis in children, the chief histological changes are marked increase in the lymphoid tissue and lesions in the crypts. Every tonsil showed bacterial infection and 56 per cent. of the bacteria were Bacteria tend to follow a definite path, virulent for the mouse. reaching the lymph tracks of the pharyngeal wall. In a separate series examined for tuberculosis it was found that the giant cells were generally in the lymphoid tissue, but rarely seen elsewhere. The authors' conclusions are that rather more than half of the children with enlarged and unhealthy tonsils associated with cervical adenitis harboured pathogenic organisms in their tonsils, the streptococcus being the commonest. On the other hand, tuberculosis was only found in about 5 per cent. of cases. It seems probable, therefore, that tuberculosis is only a late infection; a view borne out by the fact that, when the infected tonsils are removed by operation, the affected glands frequently subside. The children examined were between two and fifteen years of age. MACLEOD YEARSLEY.

#### Lessons to be learned from the Results of Tonsillectomy in Adult Life. W. C. ALVAREZ. (Journ. Amer. Med. Assoc., 26th May 1923.)

With a view to ascertaining the end-results and determining the indications for tonsillectomy, the writer questioned 345 patients whose tonsils had been removed. "One person in every four, entering my office," he states, "has had his or her tonsils out."

The best results are obtained in those who suffer from definite tonsillitis. In such cases a cure may be predicted in most cases. Less satisfactory are those whose tonsils have been removed simply because pus could be expressed from them. In only 10 of the 32 cases in this group was improvement noted.

The results of removal for "rheumatism" were poor, only 7 of the 47 cases reporting a cure, and 5 reporting improvement.

Tonsillectomy should not be done for the relief of troubles outside the throat until the patient has been carefully studied by a competent physician. DougLAS GUTHRIE.

#### The After-Results of the Different Methods of Tonsillectomy, with Special Reference to the La Force Guillotine as compared with the Ordinary Dissection with Snare: A Critical Review of 200 Cases. R. PATTERSON. (Laryngoscope, Vol. xxxiii., No. 4, p. 280.)

Dr Patterson, while doing post-graduate work in Philadelphia, investigated the different methods of tonsillectomy taught by the various schools in that city. Among causes of poor results are (1)a tendency to hurry on the part of the surgeon; (2) lack of proper training by many who claim to be specialists; (3) general practitioners

and surgeons who consider the operation to be a minor procedure that any tyro may undertake.

The following are the headings under which the results were judged: (1) Hæmorrhage; (2) complete removal of the tonsil; (3) injury to pillars, uvula, palate, and pharyngeal muscles; (4) preservation of normal anatomic relations; (5) time of operation; (6) need of assistance; (7) ease of operation; (8) interference with anæsthetists; (9) degree of reaction.

The La Force Guillotine and the snare methods are compared under the headings mentioned. In every instance the La Force method gave the more favourable results. Post-operative results in 150 cases show the following :---

Parts Injured.							Snare, 75 cases.	La Force, 75 cases.
Soft palate injured .	•	•	•	•			2	0
Part of tonsil remaining	•	•					12	8
Anterior pillar injured	•	•	•				19	15
Posterior pillar injured	•		•	•	•	•	23	0
Anterior and posterior pillar injured						•	13	o
Either anterior or posterior pillar injured					•	•	52	19

The absence of hæmorrhage is emphasised in the La Force method; the author states that the operation may be completed without soiling a pair of white gloves. Obviously this is a great advantage in anæmic and weak patients. Apparently all the operations were carried out on children under general anæsthesia. ANDREW CAMPBELL.

#### PHARYNX AND NASOPHARYNX.

Round-celled Sarcoma of the Pharynx with Glandular Involvement, with a Comparison of the Results of Treatment by Excision and X-Rays. Professor JACQUES. (L'Oto-Rhino-Laryngologie Internationale, January 1923.)

A primary growth in the tonsillar region disappeared with the application of radium. No recurrence took place at this site, but two rapidly growing secondary masses appeared at the root of the neck, one on the right sub-clavicular region and the other below the lower half of the left sterno-mastoid, infiltrating the muscle and large vessels. The tumour on the right side was excised without difficulty, and was identical in structure with the primary growth. That on the left was too extensive for removal and was treated with radium needles, with a dose of 10 mgms. for forty-eight hours. In less than a week the growth had entirely disappeared. A recurrence rapidly took place on the side operated on, the radiated side, however, remaining free.

A. J. WRIGHT.

## Pharynx and Nasopharynx

#### Transnasal Dilatation in Adhesions of the Soft Palate to the Posterior Pharyngeal Wall. A. RÉTHI, Budapest. (Zeitschrift f. Hals-, Nasen-, und Ohrenheilkunde, Vol. ii., p. 260, 1922.)

After detachment and the formation of plastic flaps Réthi uses a long-curved dilator which he passes through the nose; the blades are crossed and introduced one into each nostril, then fixed by a screw at a joint after the fashion of midwifery forceps. The outer ends are compressed together by means of a screw with a winding nut. One case derived great benefit from the use of this instrument after simple detachment without plastic flaps. The instrument is first introduced daily, and, later, every two, three or four days, and worn during either the day or the night. JAMES DUNDAS-GRANT.

#### The Significance and Treatment of Adhesions in the Oro-Pharynx. KARL SCHROEDER, Hamburg. (Zeitschrift f. Hals-, Nasen-, und Ohrenheilkunde, Vol. ii., p. 379, 1922.)

After the operative detachment of the adhesions the writer enumerates various methods of preventing reunion of the cut surfaces or contraction of the cicatrices, and he quotes Réthi's five groups, traction, expansion, obturator, plastic, instrumental dilatation. Schroeder's method after detaching the adhesions is to make a small apron out of a piece of india-rubber bandage doubled on itself, of such a size as to go conveniently behind the soft palate; to each of the strings of the apron he attaches a silk ligature which he passes through the respective nostrils from behind forward, secundum artem. To keep up the dilatation he uses above all the finger, and further a two-bladed dilating instrument passed through the mouth after the fashion of a Hajek's dilator, and this is kept in for half an hour at a time or longer. He also recommends self-massage, by means of a Hartmann's woolholder on which a lubricated pledget of wool is wrapped. As regards the duration of treatment he allows two or three years. The result depends on patience and energy and, naturally, also on the extent of the cicatrices and the duration of the adhesions.

JAMES DUNDAS-GRANT.

#### THE ŒSOPHAGUS.

#### Metastases of Esophageal Carcinoma. GORDON F. HELSLEY, M.D. (Annals of Surgery, March 1923.)

Evidence is brought to show that metastases in œsophageal cancer do not occur very early. In a series of 70 fatal cases, 64 per cent. had no metastases and 6 per cent. had secondary growths limited to regional lymph nodes.

Considering the average duration of symptoms (4 to 8 months), it is thought that there is ample time for diagnosis and treatment before metastases appear.

The possibility of metastases in carcinoma of the œsophagus, without definite evidence of the same, should not be advanced as contra-indicating radical operation. W. NICOL RANKIN.

#### Treatment of Diverticulum of the Esophagus. CHARLES H. MAYO, M.D. (Annals of Surgery, March 1923.)

Three methods of treatment are mentioned: (1) External surgical removal in one or two stages; (2) change of position; (3) obliteration.

If general anæsthesia is employed, the sac must be well emptied. Danger of suffocation is thought to be so great that local anæsthesia, usually novocaine, is used in practically all cases.

With small sacs, choice of operation is open; with large sacs, extending to the thorax, the two-stage operation is recommended with the sac unopened at the first stage.

The sac is delivered unopened through an incision in the line of the natural crease of the neck, packed around with a layer of gauze, or placed within a soft rubber drain to prevent union to the incision and skin, and it should be amputated and closed by suture ten or twelve days later.

In the period between the first and second operations the mediastinal space becomes closed and protected by granulation tissue.

It is believed that this method of treatment accounts for the low mortality of the operated cases in the Mayo clinic-3 deaths in 74 cases. W. NICOL RANKIN.

#### Surgical Treatment of the Esophagus. HERMANN FISCHER, M.D. (New York). (Archives of Surgery, January 1923, Part 2.)

The article is an extensive and carefully considered review of the present position of surgical treatment of malignant disease of the cesophagus. The initial work of Sauerbach with his negative pressure chamber rendered surgical treatment possible; this method was gradually replaced by positive intratracheal pressure. Torek, in 1913, effected the first successful transpleural œsophagectomy. Enderlen approached the gullet by resection of the posterior costal arches and reflection of the pleura. He considered it possible to resect the œsophagus from its bed without injury to its walls, but found it impossible to resect the tube and restore the lumen by circular suture.

Von Mickulicz was the first to approach the œsophagus by the anterior route in dogs, and found an end-to-end suture possible in

# Œsophagus

these animals. The chief difficulties to be encountered were: (a) pneumothorax, and (b) reconstruction of the  $\alpha$  sophagus; he found that in the absence of a serous coat, the muscular coat is thin and easily torn; it stretches freely but the sutures cut out.

Biondi, in 1896, performed a partial resection of the œsophagus in the dog, and drew a portion of the stomach up to meet the divided end and sutured it in position. Levy, in 1898, worked out an experimental method of inverting the œsophagus in dogs by pulling the upper end downwards by a thread through a gastrostomy opening. Ash, in 1912, removed the entire gullet. The patient made an uneventful operative recovery but died of inanition. During the course of the operation both vagi were cut. When the first was severed the pulse dropped to 44, but when the second was divided the pulse returned to normal.

Transpleural Methods.—Since the advent of differential pressure, the gullet has been attacked by the transpleural route, but the following disadvantages arise: I. The pleura is very sensitive to infections; 2. the lungs are very sensitive and powerful reflexes result from manipulation; 3. the question of drainage is difficult. For these reasons many surgeons have gone back to extrapleural drainage.

Kümmel, with one hand in the abdomen and one in the neck, in the case of a man with a short thorax, succeeded in removing the cesophagus and anastomosing the stomach to the cervical cesophagus in the neck. The author, however, questions whether the presence of the stomach in the thorax does not interfere with the action of the heart and lungs.

The author traces the following stages in development :---

- (a) Extrapleural dorsal route with attempts to reconstruct the lumen.
- (b) Transpleural differential restoration of tube by stomach or buttons.
- (c) Transpleural with removal of the whole cosphagus and the fixation of the stump outside.
- (d) Extrapleural removal of entire esophagus by evagination, using the combined abdominal and neck routes with or without transposition of stomach.

*Results.*—Only cases involving the cardiac portion recovered. The author places on record three cases which recovered, but of these, one died of recurrence a few months later.

The article is completed by an extensive bibliography.

E. MUSGRAVE WOODMAN.

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