ABSTRACTS

THE EAR.

The Middle Ear as a Source of Chronic Septic Absorption. E. WATSON-WILLIAMS, M.C., Ch.M., F.R.C.S. (*Practitioner*, September 1925.)

The author pleads for the inclusion of the middle ear in the list of possible foci of infection where such have to be sought for in toxæmic conditions. "The middle-ear tract is small, but the area from which absorption can take place is as large as that of a sphenoidal sinus, and larger than that usual in an apical dental abscess!"

The recognition of the middle ear as the probable root of infection in a given case does not necessarily mean the need for a radical mastoid operation. Conservative measures should always be given an adequate and careful trial. Details of cases are given in which mastoid operation relieved the patient of neurasthenia, loss of general health, myalgia, mental changes, epilepsy, and acute nephritis. The last-named case presents features of unusual interest. The consideration of the probable effect of operation on the general health of the patient deserves, in the author's opinion, more prominence than it receives when, in cases of otorrhœa, the "pros and cons" of surgical interference are being weighed. T. RITCHIE RODGER.

The Treatment of Deafness. E. WODAK. (*Münch. Med. Wochenschrift*, No. 28, Jahr. 72.)

Wodak has long been of opinion that arsenic may be employed with advantage as a therapeutic agent in an appreciable percentage of the deaf, and that in view of our frequent powerlessness to influence these cases by the more conventional methods of treatment it is often deserving of a trial.

He orders his patients 5 mg. of sodium arseniate in the form of a pill twice daily after a meal. A total of at most 40 such pills is administered. The patient must be strictly controlled whilst the treatment is in progress, and it should be curtailed on the advent of toxic symptoms.

When oral administration was badly tolerated, Wodak used the subcutaneous method, in which case he begins with a dose of 2 mg., which can eventually, if well borne, be increased to 20 mg. His results in a classified series of cases, whilst not brilliant, were sufficiently encouraging to justify the inclusion of arsenic in the list of therapeutic means at our disposal in combating deafness.

JAMES B. HORGAN.

Abstracts

Artificial Interruption of Pregnancy because of the Presence of Otosclerosis. H. BURGER, Amsterdam. (*Acta Oto-Laryngologica*, Vol. vii., fasc. 2, 1925.)

The harmful influence of pregnancy or confinement on an existing otosclerosis in the mother is a generally acknowledged fact. The cases are far from rare where after each confinement an aggravation of the deafness occurs and sometimes also of the troublesome head noises. It is strange that books on otology, although mentioning pregnancy as an occasionally important cause, pass by the question of treatment, notably prophylaxis. Laurens quotes for otosclerosis the formula that Peter laid down for cardiopaths. For a girl, no marriage; for a woman, no pregnancy; for a mother, no lactation.

The case is quoted of a patient examined on the 22nd October 1923, who had suffered from head noises for three months. Hearing was considerably decreased during the same period. She had never complained previously of the ears. She had been married three years, and for six weeks had become pregnant for the first time. The family history showed several cases of deafness.

Examination revealed the case to be a typical one of otosclerosis, and, as no complaint of deafness had been made previously, it appeared that the pregnancy had started the condition in one predisposed to it by heredity.

As treatment was unlikely to improve the condition, the question of an artificial abortion presented itself as the only method which might prevent progress of the disease. The circumstances were very carefully considered, and the procedure was carried out on the 3rd November 1923, with good results as regards both preservation of hearing and diminution of head noises. H. V. FORSTER.

Difficulties in the Diagnosis of Cerebellar Abscess. R. SCOTT STEVENSON, M.D. (*British Medical Journal*, 15th August 1925.)

A short résumé is given of the text-book signs of cerebellar abscess and the differential diagnosis between this and abscess of the middle fossa, but it is pointed out how complicated and contradictory the picture may appear in actual practice. Two cases are cited as illustrations. The first presented typical symptoms and signs of cerebellar abscess, but proved to be a case of extra-dural abscess in the middle fossa with chronic labyrinthitis; the labyrinth tests had been impossible on account of the general condition of the patient on admission. The second case had a cerebellar abscess, although it had been diagnosed as one of simple mastoiditis. This case was of special interest as having no ear discharge and no deafness. The

tympanic membrane was opaque, but otherwise normal. Rinné's test was negative, and there was absence of vertigo, nystagmus, and optic changes. The pulse rate was 112. The only symptoms were swelling and tenderness over the mastoid process with severe headache.

T. RITCHIE RODGER.

Ascending Hemiplegia in Thrombo-phlebitis of the Superior Longitudinal Sinus. M. LANNOIS, Lyons. (*Acta Oto-Laryngologica*, Vol. vii., fasc. 2, 1925.)

The author describes a syndrome noted on four occasions. It occasionally follows operative interference within the nose, particularly upon the middle turbinate and the accessory sinuses. The syndrome consists of an ascending hemiplegia which develops with extreme rapidity, starting in the lower limb, passing in several hours to the upper limb and eventually to the face.

In one case seen with Tixin there was found at the autopsy a semipurulent clot in the superior longitudinal sinus with thrombosis of several small adjacent veins; œdema was present with infiltration of the whole subjacent brain tissue, especially of the paracentral lobule and the two ascending Rolandic convolutions.

This ascending hemiplegia, however, is not absolutely pathognomonic of longitudinal sinus thrombosis, a case seen with Molinié being quoted in which no clot was found in the sinus, but a large intradural abscess extended from the parietal region to the anterior pole of the cerebral hemisphere. H. V. FORSTER.

THE LARYNX.

Laryngeal Spasm due to Hysteria. M. ZIA NOURY. (*Annales des Maladies de l'Oreille, du Larynx, etc.*, April 1925.)

The case is described of a girl, aged 15, with marked laryngeal stridor, which had persisted day and night, even during sleep, for three months, following an attack of influenzal bronchitis.

The vocal cords appeared in approximation pink and rounded. There was slight movement of the arytenoids on phonation, and the sounds "e" and "i" could be articulated. Walking was impossible without assistance. Increased knee and ankle reflexes were detected, also areas of anæsthesia in the upper and lower limbs.

The patient, who had been isolated for a few days, was forthwith placed with convalescents and treated with valerian and bromides, massage, and fresh air. Three days later the stridor completely disappeared and the movements of the cords became normal.

The question is raised whether the lesion was an adductor spasm or an abductor paralysis. The author considers that the persistence during sleep, the difficulty in phonation and the effects of massage, point to the former solution. J. B. CAVENAGH.

Hæmoptyses of Interest to the Laryngologist. L. DUFOURMENTEL. (*Annales des Maladies de l'Oreille, du Larynx, du Nez et du Pharynx*, March 1925.)

Laryngologists are often asked to examine patients who have experienced hæmoptysis, the cause of which has escaped the physician. Many of these patients, from their appearance, suggest tuberculous infection, but no positive signs of the disease have been found, on examination following the attack of hæmoptysis, either by auscultation or by radiography. In many cases, no apparent cause of hæmoptysis is found, and it is then assumed that the patient is suffering from tuberculosis, and she is sent to endure the rigours of the appropriate treatment, this, of course, more especially in the case of recurrent attacks.

The writer of the article records four cases in which the above conditions were fulfilled—recurrent hæmorrhages, physical appearance simulating the tuberculous diathesis, and no obvious focus of disease found in the chest. In the first two cases, there was observed in the glosso-epiglottic fold, a definite varix sufficiently marked to account for the hæmoptysis. In the first case, the patient showed signs of hyperthyroidism which might have some connection with the condition of the base of the tongue. As indirect examination of the third patient did not reveal a definite lesion, direct tracheoscopy was resorted to, and this disclosed three patches of ecchymosis which had undergone ulceration, situated at the bifurcation of the trachea. In the fourth case, examination by the same method showed, two centimetres below the glottis, a small tumour about the size of a lentil, which bled during examination. The cases are quoted to demonstrate the value of direct inspection in cases of this type.

GAVIN YOUNG.

PERORAL ENDOSCOPY.

A Method of Direct Laryngoscopy. G. CANUYT. (*Archives Internationales de Laryngologie*, September-October 1925.)

In a short paper the author describes the performance of direct laryngoscopy by a method which he considers to be much easier and simpler than that usually employed.

Instead of locating the glottis by pressing forward the resilient

base of the tongue with the distal end of the laryngoscope, and sliding the latter over the laryngeal surface of the epiglottis, the author passes the instrument behind the cricoid just as if he were carrying out the first step in œsophagoscopy. The instrument is then withdrawn in the middle line under visual control. As soon as the inter-arytenoid region comes into view, the respiratory air is heard passing into the instrument and then by a forward pivoting, the distal end of the laryngoscope immediately engages over the glottis. In other words, the author recommends an easy to-and-fro journey as opposed to a more difficult direct approach.

The paper is suitably illustrated. MICHAEL VLASTO.

A New Self-retaining Apparatus for Direct Laryngoscopy. F. HASSLINGER. (*Acta Oto-Laryngologica*, Vol. vii., fasc. 3, 1925.)

The instrument was designed as an improvement on the self-retaining properties of Brünings' counter pressure autoscopy, to obtain security of the instrument, to avoid the complicated handling of Killian's suspension apparatus, and to allow of an examination in the forward sitting posture. An attempt has therefore been made to produce an instrument, the introduction of which differs little from the passing of an ordinary tube spatula, with which laryngologists are most familiar. The principle of the apparatus consists in using the hypopharynx and the spine behind as the support from which the pressure necessary to displace the tongue and epiglottis is derived, and yet to avoid undue pressure on the upper incisor teeth.

It is obvious that in the use of this instrument anxiety as to pressure-damage to the hypopharyngeal mucous membrane covering the cervical spine must be an important consideration. Care has been taken in the design of the instrument to obviate this as far as possible, and apparently with success, a tongue spatula as narrow as possible being used to minimise the opposing resistance.

The instrument is suitable for both sitting and recumbent positions, and, in patients with loose incisors, it can be introduced from the angle of the mouth. It is a hinged instrument on the stork-bill principle. H. V. FORSTER.

Investigations with the Chest Support Autoscope, the Spreizspeculum and the Hinged Endoscopic Tube. A SEIFFERT, Berlin. (*Acta Oto-Laryngologica*, Vol. vii., fasc. 3, 1925.)

The chest support autoscope has been developed as an improvement on Killian's suspension apparatus, because, in the latter, loss of the laryngeal image may occur, and the new apparatus dispenses with outside support. The Killian spatula hook is, however, retained, but

the apparatus is suitable for the sitting patient and in various postures. It is advisable to employ three different lengths of spatula according to age.

The apparatus when introduced is fixed by an arm the angle of which can be varied, and this arm, with a suitable size of breastplate, rests upon the chest. In small children a cushion is interposed to allow of better distribution of pressure over the delicate chest wall.

In adults, the epiglottis is caught under the spatula, but in children this is not necessary with the spatula over the base of the tongue. Both hands are free with this instrument in place and bronchoscopic tubes are easily passed. Examination of the œsophagus can also be undertaken.

The "spreizspeculum" is a self-retaining instrument of the stork-bill type. When in place, the hinge is situated at the level of the incisor teeth, and therefore the branch of the speculum which presses against the spinal column in the hypopharynx needs to be telescopic, so as to give different lengths for different cases. The other branch engages the tongue and is also telescopic.

Where the mucous membrane is pressed upon over the spine it is necessary that the instrument should have the broadest possible surface, and, to avoid bruising, is cup-shaped and covered with a piece of soft rubber. For a good view of the anterior commissure it is sometimes advisable to use counter-pressure on the larynx from without, according to Brünings' method, and thereby avoid using any violence by further opening of the hinged speculum.

The author concludes that the chest support instrument, first described, is useful particularly in children, for all branches of endoscopy, and the latter (Spreizspeculum) in adults for laryngoscopy. When used without a general anæsthetic in the sitting posture, it remains easily fixed, because movement on the part of the patient would render him uncomfortable.

An œsophageal endoscopic tube is described which is split longitudinally and hinged upon a lever apparatus at the proximal end. It is introduced shut and then opened, so that instruments are easily passed. The construction of this instrument, however, only allows of moderate length. It can be fitted to a simple handle or to the Brünings' electroscope. H. V. FORSTER.

Direct Laryngoscopy in Cervico-Dorsal Flexion. R. CLAOUÉ, Bordeaux. (*Acta Oto-Laryngologica*, Vol. vii., fasc. 3, 1925.)

An instrument is described for direct vision of the larynx which combines the principles of the tongue spatula of Killian's suspension instrument with a counter-pressure bar for use against the upper incisor teeth, but instead of using a gallows for suspension of the

head, a handle is fitted so that in brief we have an elaborated tongue depressor with a semicircular bar to engage the upper incisors.

The head is bent forward on the trunk to straighten out the laryngo-tracheal angle and the spatula is used to eliminate the elevation or convexity formed by the epiglottis and base of the tongue. Binocular vision is obtained, but if both hands are to be free, either the patient or an assistant must control the handle of the instrument.

The apparatus can be used either in the forward sitting posture or with the patient lying on the back. H. V. FORSTER.

Indirect Diagnosis of Tracheo-Œsophageal Fistula by means of X-ray Photography. P. H. G. VAN GILSE, Haarlem. (*Acta Oto-Laryngologica*, Vol. vii., fasc. 2, 1925.)

Two cases of tracheo-œsophageal fistula are quoted, one of them in a boy 2 years of age. The chief symptoms were enlargement of the abdomen, refusal of food, and fairly severe stridor. The possibility of a foreign body was suggested and confirmed by X-ray, a cone-like metal foreign body being seen to lie chiefly in the œsophagus. Endoscopy was performed, and a tracheal fistula seen, and when the œsophagus was examined with the tube a foreign body was easily discovered and extracted. Fortunately for the child, air passed from the trachea into the gullet but not *vice versâ*. Recovery took place in a few days. This case, which was the more interesting of the two quoted, showed the tremendous filling with air of the whole digestive tract, and demonstrated the strength of the cricopharyngeal shutter, much more air escaping through the anus than through the pharynx, the air refusing to enter the pharynx until the digestive tract was full. H. V. FORSTER.

Congenital-Œsophageal Stenosis above the Cardiac Orifice: A New Method of Surgical Treatment. A. A. STRAUSS, M.D., and J. H. HESS, M.D., Chicago. (*Journ. Amer. Med. Assoc.*, 14th February 1925, Vol. lxxxiv., No. 7.)

The authors describe briefly the surgical pathology of œsophageal stenosis in the lower end of the œsophagus and describe a surgical method of treatment through the external abdominal route. It consists in the division of connective tissue bands which were found running from the diaphragm round the œsophagus where it entered the stomach. This enabled the surgeon to pull down through the diaphragm about 5 cm. of the œsophagus with its constricted portion. The anterior wall of the stomach was then opened near the œsophagus and a catheter was passed up through the stricture and out of the mouth. Three longitudinal incisions were made through the muscular

coat of the œsophagus down to the mucosa in the constricted portion. The stomach was then closed by sutures.

The patient was given fluids by the mouth within twenty-four hours, soft diet within four days, and full diet within one week. The patient now, four years later, is a healthy, apparently normal boy.

The second case reported, developed broncho-pneumonia, following the operation, and died. A third case, under local anæsthesia, was more successful.

The authors claim that the above method of dealing with this form of œsophageal stenosis is less dangerous and gives a more permanent cure than the usual blind dilatation work carried out through the mouth. PERRY GOLDSMITH.

Radium Radiation in Carcinoma of the Œsophagus. E. SCHEMPP. (*Münch. Med. Wochenschrift*, No. 16, Jahr. 72.)

Though the writer has failed to cure one case of malignant gullet stricture at Professor Perthes' clinic in Tübingen, he considers from practical experience that radiation, especially radium radiation, is the only satisfactory palliative treatment of this disease.

Schempp, being dissatisfied with the prevailing methods of ensuring the correct apposition and retention of the radium tube in the stenosed area, has perfected an ingenious method by means of which the tube is anchored in the vesical end of Pezzers' catheter, which latter then serves both as a filter and as a means of introducing and retaining the tube. Those interested should consult Schempp's lucid explanation and diagrams which accompany this article.

JAMES B. HORGAN.

MISCELLANEOUS.

Study of Two Hundred and Two Cases of Hay-Fever. GEORGE PINESS, M.D., Los Angeles. (*Journ. Amer. Med. Assoc.*, 21st February 1925, Vol. lxxxiv., No. 8.)

The author emphasises the importance of careful classification of the pollens as to the season of the year and the particular pollen of the season.

His summary is as follows :—

1. A thorough botanic survey of all the air-borne plants is necessary before one can intelligently diagnose and treat hay-fever.

2. The method of collecting pollens and their preservation as described in the paper is the most satisfactory in use.

3. A correct diagnosis is essential for good results and is

simplified by a thorough study of the history in each individual case, with a local pollen survey and plating, if necessary.

4. The scratch method (cutaneous method) gives as good reactions as does the intracutaneous method, with less liability to constitutional reaction.

5. The treatment on the assumption of group reaction is not as satisfactory as treatment based on tests.

6. Preseasonal desensitisation is a method of choice, and gives the best results when properly administered.

7. Multiple sensitisation is common in California; at least 87 per cent. of the present series were of that type.

8. Bermuda grass (*Cyndon dactylon*) is the most frequent offender in the south-west.

9. Reactions incident to treatment occurred most frequently in the patients who obtained the greatest amount of relief.

10. The results obtained by preseasonal immunisation compare favourably with those of other workers, giving 23 per cent. with complete relief.

PERRY GOLDSMITH.

On the Diagnostic and Prognostic Value of Lumbar Puncture in Intracranial Otogenous and Rhinogenous Complications. Dr B. KARBOWSKI, Warsaw. (*Acta Oto-Laryngologica*, 1925, Vol. vii., fasc. 3.)

The article deals with the author's own experience and material, also with the German work of Fremel from Neumann's clinic and the French work of Aboulker. The author records sterile turbid cerebro-spinal fluid in 14 out of his 17 cases of abscess of the brain, and believes that the results of his investigations confirm the views of Alexander and Neumann, who think that turbid sterile fluid is characteristic of brain abscesses. Aboulker's work deals with cases of meningitis exclusively of otogenous origin.

Concerning a detailed examination of the cerebro-spinal fluid by chemical, bacteriological, and microscopic methods, Karbowski states that the presence of a sterile or septic fluid and the existence of intact or altered polynuclear cells form the deciding factors in our investigations in such cases.

The Widal school consider that unchanged polynuclear cells are an argument for the sterility of the cerebro-spinal fluid, but Aboulker concludes that changes observed in the polynuclear cells merely prove a serious infection with virulent germs. The organism mobilises for defence mononuclear cells exclusively in non-malignant cases; polynuclears for attack in malignant infection; but the presence of damaged cells of this nature does not mean surrender. Reports from

various observers show the unreliability of generalisations. Investigations up to the present time lead to the following conclusions:—

1. A turbid or clear fluid in which streptococci, diplococci, or tubercle bacilli were found, almost without exception gave a bad prognosis.

2. A clear sterile fluid in cases with a non-malignant clinical course permits a favourable prognosis.

3. In all other cases, and they are extremely numerous, it is very difficult to form an opinion as to the prognosis, whether the fluid be clear or turbid, septic or sterile.

The author's own material is next examined. He considers it not sufficiently extensive to allow of any general statements. He thinks, with regard to brain abscesses, that the fluid is usually turbid in meningo-encephalitic cases, mostly clear in brain abscesses in the strict sense of the word, which have arisen through metastases or from thrombosis in vessels.

The condition of the cerebro-spinal fluid is also considered in some of his cases of labyrinthitis and sinus thrombosis.

H. V. FORSTER.

The Borocaines: A New Class of Local Anæsthetics. A. J. COPELAND and H. E. F. NOTTON. (*Brit. Med. Journ.*, 26th September 1925.)

This is a record of a further attempt to find a local anæsthetic equal in efficiency to cocain hydrochloride but without its poisonous properties. The writers start with the assumption that the least toxic of the available anæsthetics is ethocain hydrochloride, commonly known as novocain, and proceed to enquire why this substance is only effective when injected subcutaneously, and with the addition of adrenalin, and why it loses its virtue when applied to a surface. They found that the drug when dissolved in rabbit or horse serum has its effect increased twenty times and becomes as effective as cocain for use on the cornea. Physical absorption does not account for this, since neither gum acacia, pure crystalline, egg albumin, nor cholesterin augment the degree of anæsthesia. They come to the conclusion that the increased effect was due to the alkali present. It has long been known that alkalies increase the effect of cocain as a surface anæsthetic. They therefore directed their attention to the nature of the components of the aqueous solutions of the salts of cocain and other bases. The relative efficiency seems to depend on the strength of the acid component of the base—with a powerful acid such as hydrochloric, electrolytic dissociation predominates, while with a weak acid such as acetic, hydrolytic dissociation is more pronounced and the anæsthetic effect of the latter is the greater.

This applies to cocain, but is even more pronounced in the case of ethocain. "Although ethocain hydrochloride exerts an almost negligible surface anæsthetic action, that action becomes practically as marked as that of a cocain hydrochloride solution of equivalent strength when the solution is made alkaline by the addition of sodium bicarbonate." It was found, however, that the "equilibrium conditions" of such a mixture are complex and difficult to define, and attention was therefore next directed to salts of ethocain base prepared with feeble acids. Ethocain borate, which is on the alkaline side of neutrality, was found to be a more powerful surface anæsthetic than cocain hydrochloride of similar concentration.

Borocaines have the disadvantage of being vaso-dilator; whether this can be effectively overcome by the use of adrenalin the writers leave to the decision of clinical observers. T. RITCHIE RODGER.

Radium Treatment of Neoplasms of the Upper Air Passages. G. ALLEN ROBINSON, M.D., New York. (*Journ. Amer. Med. Assoc.*, 24th January 1924, Vol. lxxxiv., No. 4.)

The writer gives his results on 500 cases of neoplasms treated with radium over a period of five years. Under the heading of "Benign Conditions," the following varieties are mentioned:

(1) Angiomata of the nose, cheek, and lips were treated with radium with good results.

(2) Papillomata of the nose and tongue were successfully treated. Multiple papillomata of the larynx did not respond so well.

(3) Nasal polypi were favourably influenced.

(4) Rhinoscleroma was successfully treated.

(5) Nasopharyngeal fibroma was amenable to treatment.

(6) Chronic tonsillitis was very favourably influenced by radium treatment, but the author considers tonsillectomy by surgical methods as the treatment of choice.

"Malignant Neoplasms."—The writer considers that a surgical removal, with radium treatment before and after operation, gives the best results. He, however, discusses the treatment of epithelioma of the lip under a separate heading, as he considers this condition curable with radium. The glands of the neck are also treated unless very extensively invaded, when he advises a combination of surgical removal and radium as the best treatment. He also places carcinoma of the tongue in a similar class and considers radium the treatment of choice. Carcinoma of the tonsil has been treated with success.

In dealing with carcinoma of the larynx, the author advises a combination of surgery and radium treatment.

PERRY GOLDSMITH.