Any case with stridor or dyspnœa would certainly be unsuitable for this treatment and treatment with radium does not cause any œdema of the larynx. Also I find it better to do the operation with a local anæsthetic. It eliminates any possibility of a tracheotomy being required at the time and, the larynx being practically still, it is easier to put the needles in position and keep them in position than if the patient has a general anæsthetic.

Dr. J. S. FRASER (in reply) : I had some experience of thyrotomy for intrinsic cancer before I took up treatment by radium (*Journal of Laryngology and Otology*, Vol. XXXIX, 1924, 79). I quite agree with Mr. Colledge that local anæsthesia is to be preferred. As you would see, in one of the cases local anæsthesia was employed and tracheotomy omitted and, if I were called upon to do similar operations now, I would use local anæsthesia and avoid tracheotomy.

I quite agree with Sir St Clair that the suitable cases are those with a growth limited more or less to the middle of one vocal cord and in which the cord is movable. I have got better results as regards the patient's voice with radium implantation than with laryngo-fissure and, as Sir St Clair says, five out of six suitable cases have been quite successful.

With regard to the dosage, I have usually put in six one-milligramme needles and have kept them in position for six or seven days, i.e. about one thousand milligramme-hours.

ABSTRACTS

EAR

The course of Otosclerosis illustrated by Graphic Curves. E. WIRTH and H. CURTH. (*Arch. Ohr-, u.s.w., Heilk.*, 1933, CXXXVI., 202-9.)

The value of this clinical study of otosclerosis lies in the fact that a fairly large number of patients were observed over long periods, up to twenty-four years, and their hearing tested at regular intervals. The gradual diminution of the hearing power of the right and left ears is represented graphically and many of the curves are reproduced in the text.

There are no very new observations, but certain interesting points are confirmed. For instance, patients hardly ever seek advice until their deafness begins to interfere with ordinary conversation, which for practical purposes means a whisper distance of less than 3 feet. There are great fluctuations in the hearing power ; sometimes there was marked temporary improvement (see curves) but these periods never last long. The hearing may remain stationary for a long time. Periods of deterioration, like those of improvement, usually

set in very suddenly. In many cases the hearing diminished very seriously between the ages of 40 and 50. No patient became totally deaf.

J. A. KEEN.

Heredity and Pregnancy in Otosclerosis. ERIKA SCHMIDT. (*Arch. Ohr-, u.s.w., Heilk.*, 1933, CXXXVI., 188-201.)

Most authorities, but more particularly Denker, Körner, Albrecht and Hammerschlag, have accepted a hereditary factor as an important element in otosclerosis. Dr. Schmidt reproduces five family trees originally published by Körner (3) and Hammerschlag (2), also three others studied by herself. The latter are analysed in some detail and the otosclerotic inheritance is traced back for four generations. The predisposition (Anlage) to otosclerosis is inherited. To this predisposition are added certain secondary causes (exogene) such as puberty, pregnancy, puerperium and middle-ear disease. The secondary causes may or may not operate in all cases, and this explains the sporadic appearance of otosclerosis in any particular family group.

The influence of pregnancy on otosclerosis has been extensively studied. The author herself investigated forty-nine cases of otosclerosis in married women. Approximately 50 per cent. showed a definite diminution in hearing connected with child-bearing, in most cases with the first baby.

There are many conflicting opinions on the question of interrupting pregnancy in order to safeguard the hearing. As the diagnosis of otosclerosis is still difficult and the influence of pregnancy on this ear disease is uncertain, most otologists will agree with Kümmel, who rejects an induced abortion on principle. It is characteristic of otosclerosis that the deafness is progressive, with or without pregnancy. There are also cases on record in which an induced abortion caused an increase in the deafness and tinnitus just as a full term pregnancy might have done.

In spite of these objections one should not make too rigid a rule. For instance, if both parents have otosclerosis and a previous childbirth has caused an increase in the mother's deafness, it may be justifiable to interrupt a second or a third pregnancy. Also, there is a eugenic indication as well as a purely clinical one.

J. A. KEEN.

A case of intermittently advancing Thrombosis of the Transverse and Sagittal Sinuses. E. RUTTIN. (*Acta Oto-laryngologica*, XIX., fasc. 1.)

Lateral sinus thrombosis rarely oversteps the torcular; when it does so, the extension is usually to the superior longitudinal (sagittal) sinus, but may be to the lateral sinus of the opposite side,

as in a case reported by the author in 1914, of which he gives an illustration in the present paper.

Henrici and Kikuchi showed in 1903 that in about 3 per cent. of bodies the superior longitudinal sinus is continued as the right lateral (transverse) sinus, while the left lateral sinus proceeds from the straight sinus. In such circumstances, when thrombosis of the right lateral sinus passes beyond the torcular, the superior longitudinal sinus is very prone to become thrombosed, as it has no out-flow into the left lateral sinus.

This anatomical condition was evidently present in the case which is fully described in this paper, since a sound passed along the lateral sinus to the torcular entered, not the lateral sinus of the opposite side, but the superior longitudinal sinus. The result of this condition was an unusually extensive thrombosis of the superior longitudinal sinus, extending from a right lateral sinus thrombosis, which complicated an acute otitis media.

The advance of the thrombosis, which was accompanied by sudden rise of temperature, was interrupted by three periods of two, nine and six days respectively, during which pyrexia was absent. Such prolonged apyrexial intervals are unusual and the author suggests that this variety of thrombosis be described as "intermittently advancing sinus thrombosis".

In most cases of sinus thrombosis the fall of the temperature after the operation indicates that the process has been arrested, and that no further intervention will be required. A subsequent recurrence of the fever in such a case would point to an intermittent advance of the thrombosis.

In spite of the extent of the thrombosis the case described made a complete recovery.

THOMAS GUTHRIE.

A Cerebral Abscess of Otitic origin spreading to the opposite cerebral hemisphere through the Corpus Callosum. DOTT. A. BRONZINI. (*Archivio Italiano di Otologia*, May, 1933.)

Following an otorrhœa of five years' duration, a man of 45 complained of pain in the right side of the head. He was tender over the mastoid process, had no nystagmus, but tended to fall and to past-point. A month later he was brought to hospital in a state of coma. The mastoid was immediately opened and a wide decompression performed. There was much pus and granulation tissue, and the dura of the middle fossa was thickened and covered with granulations. One hundred c.cm. of pus were drained from the temporo-sphenoidal lobe. The flow of pus continued to be excessive for ten days, in spite of the insertion of a 2 cm. drainage tube. On the twelfth day a counter-opening was made, and pus was then seen to be welling into the abscess cavity from the region

of the posterior part of the lateral ventricle. A complete paralysis of the left arm occurred later and the patient eventually died. Autopsy showed the right lateral ventricle to be filled with pus which tracked through the *corpus striatum*, the internal capsule and the fornix into the third ventricle. It also tracked through the posterior part of the *corpus callosum* and opened into a large abscess cavity in the posterior horn of the left lateral ventricle.

F. C. ORMEROD.

Contribution to the Question of the Treatment of Acute Infectious Inflammation of the Inner Ear. TORSTEN BLOMROOS (Helsingfors). (*Acta Oto-laryngologica*, xix., fasc. 1.)

The older, conservative school believe that most cases of inflammatory labyrinthitis will heal if the injurious factor, especially in the middle ear, is removed. After the publication of Bárány's great work on the caloric reaction of the ear it was thought possible to determine by means of the caloric test whether a labyrinthitis was serous or purulent. Around a more active method of procedure which followed this work there arose the so-called "Vienna school" which tries to avoid the ever-threatening complication of meningitis by the aid of an early labyrinthectomy; but a temporary loss of function of the labyrinth may take place with a serous labyrinthitis, and the caloric test may not always be decisive.

Further, lumbar puncture began to be used more to diagnose an approaching meningitis. These and other considerations gave rise to a more temperate opinion with which the name of Lund is associated. According to Lund a diffuse labyrinthitis ought not to be operated on before the number of cells at a lumbar puncture shows that there is meningeal irritation, and when this irritation is established a labyrinthectomy should be performed forthwith. A cell content exceeding two cells per c.mm. is an indication of meningeal irritation.

The author has collected all the case-records of acute diffuse suppurative labyrinthitis which have been treated at Professor Meurman's clinic since 1919. The material consists of forty-six cases, and includes labyrinthitis as a consequence both of acute and chronic otitis media. With two exceptions all the cases have been treated by labyrinthectomy. They are all briefly described, and grouped as follows:

1. Acute otitis media with acute labyrinthitis.
2. Chronic otitis media and acute labyrinthitis.
   (a) With meningitis before admission.
   (b) Without meningitis on admission.
3. Post-operative labyrinthitis after the radical mastoid operation.

In the first group eleven cases died out of sixteen, which confirms the well-known fact that the prognosis of an acute otitis complicated by acute labyrinthitis is unfavourable. The only two cases without meningitis before the resection of the labyrinth were saved by the operation, and the writer concludes in favour of early labyrinthectomy before signs of meningeal irritation occur, even at the risk of occasionally opening a labyrinth unnecessarily.

In group " 2A " six cases died and only three recovered. In only one case in this group was pus actually found in the labyrinth.

In this group it may be noticed how cases of meningitis as a complication of chronic otitis media may fairly often be cured in spite of a rather strong pleocytosis.

At the present time there can be only one opinion as regards the treatment of acute, diffuse, destructive labyrinthitis with meningitis. These cases must be operated on immediately and a labyrinth resection performed. Very different opinions prevail on the subject of opening the *porus acusticus internus*. This measure appeared to have a favourable effect in only a few of the writer's cases. In group " 2B " twelve patients recovered out of fifteen.

The experience of the clinic concerning this group is summarised as follows :

" Patients with chronic and acute labyrinthitis must have the lumbar puncture performed directly on admission to the clinic. If it appears that the cell content in the lumbar fluid is not higher than it ought to be, the patient should be left in peace and ordered absolute quiet. A radical mastoid operation alone must not be done at this stage. Lumbar puncture should be repeated when necessary, even several times a day. If the cell content at the next puncture be more than 5 per c.mm. (which number appears to be about the limit), i.e. clearly on the increase, labyrinthectomy must be performed immediately. On the other hand, if the condition improves, and the symptoms of labyrinthitis decrease, an operation, if necessary, should not be done until the acute stage is decreasing, which can mean waiting several weeks."

In group 3 there were three deaths. The obvious need for extreme care during the radical mastoid operation in cases of fistula of the labyrinthine wall is strongly emphasised.

In acute inflammation the infection extends from the inner ear to the meninges partly by natural pathways, partly by paths formed by the pathological process. Concerning the preformed paths the *aqueductus vestibuli* is of less importance as it ends in the *saccus endolymphaticus* beneath the resistant dura. The internal auditory meatus and also the *aquæductus cochleae* (especially in children—Meurman) are more likely to be followed and, finally, infection of the meninges may take place through an osteitic fistula (usually

of the posterior vertical canal) leading towards the posterior cranial fossa.

The question of the more rapid development of a meningitis in cases of acute otitis than in the chronic variety is discussed, credit being given chiefly to the recognised general factor of differences in virulence, immunity, and " preparedness ".

The importance of the labyrinthitis as the complicating factor in the meningitis is often shown by the localisation of the meningitis to the posterior fossa of the skull for a time on account of the sheltering tentorium, hence the classical signs of meningitis with cortical irritation and unconsciousness are absent, even in spite of a strong pleocytosis.

Only a few of the cases were drowsy or unconscious, though many showed the presence of a fully developed meningitis with pleocytosis, pain in the back of the head, and stiffness of the neck.

An uncomplicated labyrinthitis causes little or no fever. If fever supervenes lumbar puncture should immediately be performed and the signs of meningeal irritation looked for.

With regard to the functional examination of the inner ear by caloric and auditory tests, other methods of examination must be taken into consideration, especially lumbar puncture. There are, however, difficulties in interpreting the results of this latter, particularly when the fluid obtained may be contaminated with blood from the puncture wound and, further, a general leucocytosis might possibly influence the cell content of the cerebrospinal fluid. In fact the lumbar fluid was seldom found free from cells.

Bacteriological examination of the cerebrospinal fluid confirms Hinsberg's observations of the rarity of occasions upon which organisms have been found therein, chiefly in the early stages of labyrinthogenous meningitis in spite of a highly developed pleocytosis. If bacteria are found in the fluid the prognosis is bad, and if streptococci—hopeless.

Finally, the significance of the association of meningitis with acute labyrinthitis is illustrated in a table and the results of the writer's investigations are compared with those obtained by Holmgren and Lund.

H. V. FORSTER.

NOSE AND ACCESSORY SINUSES

Chronic Infection of the Nasal Sinuses in connection with Chronic Laryngitis, Bronchiectasis and Asthma. DOTT. ACHILLE PERONI. (*Archivio Italiano di Otologia*, May-Sept., 1933.)

This series of articles constitutes a monograph on the effects of sinus suppuration on the larynx and lungs.

Nose and Accessory Sinuses

The author recalls that there can be chronic infection of the sinuses without suppuration, but with hyperplasia of the nasal and sinus mucosa. The origin of the resulting catarrh is often unrecognised and it is diagnosed as nasopharyngitis. The secretions have a tendency to run into the larynx and to find their way into the upper air passages.

In the larynx they produce hypertrophic laryngitis, especially in the posterior half, with thickening in the interarytenoid region. They are also responsible for the contact ulcer on the vocal processes of the arytenoids—where there may be even loss of cartilage.

The author has investigated the sinuses of large numbers of cases of bronchiectasis and concludes that there is a very intimate connection between infection of the sinuses and this condition, and he believes that the sinusitis is very often primary. If not primarily the cause, he is of opinion that the nasal condition is sufficient to augment and protract the disease.

With regard to asthma, he inclines towards the allergic nature of the attacks. He does not believe that the presence of sinus infection or of nasal polypi is sufficient to cause asthma, but is of opinion that the nasal region and the asthma are different manifestations of the same allergic state. He agrees, however, that such lesions in the nose aggravate the asthma, and must be cleared by surgical or other measures before the asthma is likely to improve.

F. C. ORMEROD.

Infection of the Nasal Sinuses and Tonsils in the Psychoses. P. K. McCOWAN. (*Lancet*, 1933, ii., 853.)

The writer points out that the importance of toxæmia as a causative factor in the psychoses is still undetermined, and that in Birmingham, oral and nasal infections are considered to be the most important causative factor in most forms of mental disease. This paper is based on 807 consecutive admissions to the Cardiff City Mental Hospital during 1930-2, and the writer's observations differ widely from the Birmingham results. The latter give over 80 per cent. of patients with sinusitis, while that for Cardiff is only 47 per cent. The primary difference seems to lie in what is regarded as sinusitis. In Cardiff it is not thought justifiable to diagnose it on the growth in culture of a few organisms from sinus washings. The investigation needs to be carried out very critically ; at present the work is experimental and its interpretation controversial, wherefore extravagant claims may vitiate results. McCowan considers that nasal sinus and tonsil infections are important causative factors in a small minority of psychotics, especially are they important in the toxic exhaustive processes, in which they appear to be comparatively common and frequently causative.

MACLEOD YEARSLEY.

Abstracts

On the Pathology of Perforating Ulcer of the Septum. G. KELEMEN. (*Arch. Ohr-, u.s.w., Heilk.*, 1933, cxxxvi., 242-7.)

A woman, aged 64, required a submucous resection prior to an operation for chronic sinus suppuration. When the excised piece of cartilage was examined it was noticed that a cone-shaped piece in the anterior part showed a yellowish discoloration. Microscopic sections (see illustrations) demonstrated that the cartilage cells had degenerated in the discoloured area. The cartilage in this part had undergone a partial necrosis.

It is assumed that this is a condition which precedes the formation of a perforating ulcer, at a stage before the perichondrium and mucosa are involved. In the above patient the septum healed normally and had remained healed three months later, when the sinus operations had also been completed. This shows that the disease process was strictly limited to the cartilage and had not yet affected the perichondrium and mucous membranes covering the septum.

J. A. KEEN.

Ætiology, Pathogenesis and Bacteriology of Ozæna. LEROUX-ROBERT and COSTINIU. (*Les Annales d'Oto-Laryngologie*, June, 1933.)

Some factors in the ætiology of ozæna such as sex, race, occupation, trauma, sinus infection and strumous and syphilitic diatheses are discussed. The canine transmission theory has been carefully investigated and found to be valueless. The pathogenesis of ozæna must be considered under two headings, (a) the atrophy of the mucous membrane, (b) the bacteria which flourish on it. The view that undue patency of the nasal fossae, either pre- or post-operative, is a cause of true ozæna is not upheld. Recent work has shown that the mucosal atrophy is secondary to a neuritis of the trigeminal nerve; either descending (spheno-palatine lesion) or ascending (ethmoidal branch of the nasal branch of the ophthalmic, or sphenoidal branch of the superior maxillary). Clinical evidence of this neuritis is not wanting. We have the case reported by Worms and Reverchon in which an injury to the spheno-palatine region was followed by atrophic rhinitis. Also the fact that whenever careful enquiry is made into the history of a case of ozæna there is evidence of a hypertrophic stage, which may be ascribed to a nerve irritation. "Mouth breathing occurred in childhood but without nasal obstruction": there was no consciousness of nose breathing, in short, because as children they did not know how to breathe through the nose. The influence of the endocrine system is also discussed. In considering the bacteriology of ozæna, the authors stress the point that whatever may be the bacteria responsible for the clinical features of ozæna, they are not responsible for the atrophy of the

mucous membrane. Of the many bacteria associated with ozæna, that of Perez is the one most consistently found to be present. If there is no ozæna without smell, there is no smell without the bacillus of Perez. The article terminates with a few remarks on the treatment of the condition.

M. VLASTO.

LARYNX

The use of the Stroboscope in Laryngology. O. HEYMANN. (*Arch. Ohr-, u.s.w., Heilk.*, 1933, cxxxvi., 64-116.)

Pathological conditions of the larynx are not often investigated with the stroboscope on account of obvious difficulties, and Dr. Heymann's lengthy article appears to be one of the first studies on the subject. In making an analysis of the vocal cord movements with the stroboscope, at first the apparatus is arranged in such a way that the tone of the revolving disc corresponds to the note sung by the patient and "an apparent immobility of the cords" is obtained. Then the numbers of the disc-rotations are very slightly diminished and one sees the movements of the cords artificially slowed down.

The movements of the right and left cords are observed in relation to each other. Any deviations in the regularity of these movements are of diagnostic significance. Different types of vibration correspond to different methods of voice production and there are many references to previous studies with the stroboscope in phonetics.

A phenomenon which is often observed is a slightly more sluggish movement of the left cord as compared with the right. This appears to have no pathological significance. Among fifty normal cases in the author's series slowing of the left cord was found six times.

In acute laryngitis the patient is hardly able to produce a tone, and stroboscopic observations are of very little value. In subacute laryngitis, approximately two-thirds of the cases showed positive findings, for instance, irregular movements, slowing on one side, or differences in the level of the vocal cords.

Other laryngeal conditions which the author studied were chronic simple laryngitis, tuberculosis, recurrent paralysis, singers' nodes and all the various functional disturbances of the voice. Dr. Heymann claims that a study of the vocal cord movements with the stroboscope is specially valuable in laryngeal tuberculosis. In seven out of eight cases with manifest tuberculosis of the larynx there were marked differences in the cord movements of the two sides, e.g. a complete inactivity of one cord in three cases. In one patient abnormal movements of the cords were observed before

tuberculosis could be diagnosed with the laryngoscope. In other suspected cases the vocal cord movements (stroboscopic) were normal and no tuberculosis developed.

J. A. KEEN.

TONSIL AND PHARYNX

Total Tonsillectomy in the Adult under Local and Regional Anæsthesia with the Sluder Instrumentation. GEORGES CANUYT. (*Les Annales d'Oto-Laryngologie,* Aug., 1933.)

The technique of the operation described in the text is that commonly employed in this country and known as the " reversed guillotine method ". The capital point in securing good anæsthesia is the blocking of the glosso-pharyngeal nerve. The needle is inserted in the plane of the last molar through a point in the anterior pillar at the junction of the upper third and lower two-thirds. The needle is inserted to a depth of one cm. and the extra-capsular tissue is carefully infiltrated. The technique of the operation is described with the help of illustrations. The author prefers the method of removing tonsils by the reversed guillotine to any other method. In children he operates under general anæsthesia.

M. VLASTO.

Do the Tonsils contain substances which influence body growth? F. REICHMANN. *Observations on the preceding article.* C. R. GRIEBEL. (*Arch. Ohr-, u.s.w., Heilk.,* 1933, CXXXVI., 46-53.)

Voss and Griebel have described animal experiments (on tadpoles and chicks) which seemed to prove that the human tonsil contained substances capable of delaying normal development. Dr. Reichmann has studied this question in a new series of experiments. His aim was to eliminate from the tonsil extracts all factors such as toxins and living organisms which might exert a harmful influence apart from any question of a growth hormone.

The tonsils were cut up into small pieces with sterile scissors and ground to a fine paste. This paste was diluted with ten times its volume of sterile 0·9 per cent. saline solution and then passed through a Berkefeld filter. Tonsil extract obtained in this manner is sterile and can be injected intravenously into animals without producing harmful effects.

One series of experiments was made with tadpoles, the tonsil extract being added to the water in which the tadpoles developed. These experiments were quite negative; some groups showed a slightly increased, others a slightly diminished growth-rate. Another

series of experiments with litters of young rabbits also gave inconclusive results. These animals received the tonsil extract subcutaneously. On the whole, the " treated " rabbits seemed to gain weight a little more rapidly than the " control " ones.

Dr. Griebel who was associated with Professor Voss in previous researches on this subject, criticises Reichmann's experiments. He states that the active substances in the tonsil extract (probably phosphatides) are destroyed by Reichmann's method of preparing the extract. In the tadpole experiments the extract which is added would simply act as an accessory food. Further, rabbits are not suitable for these experiments, as they do not react to tonsil extracts ; mice should be used. Griebel does not admit that Professor Voss's and his own conclusions have been proved incorrect up to the present.

J. A. KEEN.

Bacterial Findings and Epithelial Changes in Tonsil Sepsis. K. LINCK. (*Arch. Ohr-, u.s.w., Heilk.*, 1933, CXXXVI., 210-41.)

The author has investigated the problem of the septic tonsil. He wished to ascertain whether one can generally demonstrate a definite relation between the bacterial and histological findings on the one hand, and the disease processes ascribed to tonsil sepsis on the other hand. A series of cases are first described and in nearly every instance the appearances of the tonsils after section are illustrated.

The organisms obtained from the tonsils were classified morphologically into : Cocci, in chains, clumps or isolated double ones ; bacilli of all sizes and with different staining reactions ; spirillary forms, mostly Gram negative. They were found chiefly in the crypts, more especially towards the surface. Organisms were also discovered in the epithelium of the crypts and small groups in the parenchyma. When organisms were seen in the parenchyma there was seldom any inflammatory reaction around them. One had the impression that the bacteria were only temporarily arrested during their passage through the tonsil.

The different forms of epithelial defect are described and analysed. The author then attempts to bring these findings into line with the clinical conditions which he had treated by tonsillectomy. In those patients in whom the tonsil sepsis had presumably caused lesions in the joints, kidneys, endocardium, etc., there were very suggestive changes. For instance, bacteria had broken through the loosened epithelium and were found freely between the follicle cells, i.e., they had access to the lymph circulation. In other areas the superficial epithelium was absent and very vascular granulation tissue was in direct contact with the septic contents of the crypts. This suggested that bacteria and their products could

be absorbed directly into the blood stream. In such cases the bacteria may be said to be squeezed into the circulation with every act of swallowing. These various explanations are supported by very convincing microscopic sections.

The author concludes by stating that he has never met a case in which the detailed examination of the tonsils after enucleation did not fully demonstrate the causative relation between tonsil sepsis and the condition which had been treated.

J. A. KEEN.

Preventive Ligature of the Carotids in Malignant Tumours of the Tonsil. M. OMBRÉDANNE. (*Les Annales d'Oto-Laryngologie*, July, 1933.)

Preliminary ligation prior to surgical or diathermic treatment of the tonsil is of threefold importance: (1) It provides a bloodless field in the site of operation provided that the ligation is carried out at the time of the extirpation of the tumour. (2) It allows the surgeon to extend the area of his dissection. (3) It facilitates the removal of the cervical glands along the course of the large vessels of the neck. In the great majority of cases, ligature of the external carotid alone is necessary. Ligature of the common carotid (which should always be associated with ligature of the internal jugular as a safeguard against anæmia of the brain) should be carried out only in those cases in which the surgical removal—as foreshadowed by the clinical examination—is likely to be very extensive. Ligature of the common carotid is far less dangerous than ligature of the internal and external carotid. In some cases when ligature of the external carotid alone may be considered to suffice, it might be prudent to encircle the common carotid with a ligature and entrust it to an assistant who can immediately complete the ligature in the event of an injury to the artery. It should be realised, however, that owing to the blocking out of the area supplied by the external carotid, there is a greater risk of cerebral complications than if the common carotid had been tied in the first instance.

M. VLASTO.

ŒSOPHAGUS AND ENDOSCOPY

Some Remarks on Tracheo-Broncho-Œsophageal Fistulae. PAULO MANGABEIRA-ALBERNAZ. (*Les Annales d'Oto-Laryngologie*, August, 1933.)

The author has collected the records of seventy-four cases from the modern literature. Of these twenty-six (35·13%) were congenital; twenty-two were neoplastic (29·7%). Of the others, syphilis, tuberculosis, trauma, and actinomycosis were some of the

causes. The commonest symptoms of this rare affection are: (1) Violent coughing following deglutition. (2) The elimination of food particles with the sputum. (3) Cyanosis—particularly in the suckling in congenital cases. (4) Gurgling in the tracheo-bronchial region. (5) Distension of the stomach, particularly in congenital cases. The diagnosis and treatment of these conditions is discussed in detail. There is a useful classification, and a full bibliography.

M. VLASTO.

Multiple Malignant New Growths associated with Carcinoma of the Œsophagus. J. E. G. McGIBBON. (*Lancet*, 1933, ii., 306.)

The writer states that in a series of forty cases of œsophageal cancer he has met with four in which there was more than one growth. (1) Male, 67. Nodular growth opposite upper end of trachea, with a scirrhous carcinoma close to the pylorus. (2) Male, 65. Growth 7½ in. from incisor teeth, another 4 in. lower down. (3) Female, 46. One 10 in. from incisor teeth, a second 2 in. lower. (4) Male, 62. Growth 13 in. from incisor teeth, with a carcinoma of the left side of the tongue, an example of spread by implantation, which is very rare according to Abel, but is considered by Oldham to be not uncommon in the alimentary canal. McGibbon points out that opinions are divergent as to the degree of malignancy and of metastasising tendency of carcinoma of the œsophagus, and that these four cases appear to support the doctrine of the great virulence of such growths.

MACLEOD YEARSLEY.

Non-traumatic Œsophageal Stenosis in Young Children. JEAN GUISEZ. (*Les Annales d'Oto-Laryngologie*, July, 1933.)

Although the majority of stenoses of the gullet in children are traumatic in origin due to the swallowing of caustic fluids, there are a certain number of cases of congenital origin in which the dysphagia manifests itself either soon after birth or when the food is changed from the liquid to the semi-solid. The time of onset of the symptoms depends on the degree of the constriction, which is of valvular type and is situated either at the cardia or in the lower third of the œsophagus. The usual history obtained in these cases is that of vomiting from early infancy, and the cause is ascribed to some derangement of the stomach; it is only when dysphagia becomes complete that radiography clinches the diagnosis. In a few cases, the acute dysphagic symptoms do not show themselves until adult life. In some of these cases it has been found that the obstruction is not valvular, but is due to a hypertrophic condition of the cardiac sphincter akin to that seen at the pylorus. The author describes in detail five recent cases of his own, although the condition must be very rare inasmuch as he has found records of only sixteen cases of

the condition. The treatment of these cases is dilatation through an endoscope. A filiform bougie is introduced through the tiny opening hidden in the folds of the mucosa, and this is left *in situ* for as long as the patient can tolerate the discomfort (4-6 hours). Gradual dilatation assisted by circular electrolysis leads to a cure. In every case, therefore, in which unexplained vomiting occurs in a child, when this vomiting is paroxysmal, comes on immediately after deglutition and in which the vomited material is practically unaltered, one should bear in mind that the condition may be due to an œsophageal stricture which is amenable to treatment by appropriate endoscopic therapy.

M. VLASTO.

MISCELLANEOUS

Severe Damage to the Lungs caused by the inspiration of Liquid Paraffin. H. BODMER and P. KALLÓS. (*Arch. Ohr-, u.s.w., Heilk.*, 1933, cxxxvi., 40-5.)

The authors describe a case of " cirrhosis of the lungs " caused by the aspiration of liquid paraffin used over a long period. The patient was a man, aged 52, with pachydermia laryngis which had been diagnosed eleven years before. Subsequently symptoms developed which suggested a chronic lung infection and two X-rays taken at an interval of five years showed a progressive thickening at the hilus and of the whole bronchial tree. The diagnosis remained obscure until it was found that the patient was in the habit of instilling 50-100 c.cm. of liquid paraffin daily into both nostrils. He deliberately aspirated the paraffin " in order to oil the vocal cords ". In spite of the violent coughing fit which generally resulted he had carried out the treatment with great regularity for some ten years.

The liquid paraffin in the bronchi acted as a foreign body and had caused the chronic lung condition (cirrhosis). The authors point out that liquid paraffin is a chemically stable substance and does not saponify in the body like animal or vegetable oils. They suggest the use of a vegetable oil instead of liquid paraffin when this is likely to be required for long periods.

J. A. KEEN.

An Example of the Hughlings-Jackson Syndrome. DOTT. PROF. LUCIA-NICOLAI. (*Archivii Italiani di Laryngologia*, June, 1933.)

The association of paralysis of the muscles of the pharynx and larynx with that of the muscles of the shoulder (sterno-mastoid and

trapezius) was first described by Hughlings-Jackson in 1864. The author's father has described a case in which the symptoms were due to a tuberculous pachymeningitis. The symptoms may be due to injury or disease within the cranial cavity, during the passage of the nerves through the base of the skull or in the neck. The lesions which may paralyse the nerves (IX, X, and XI) are very numerous, and include aneurysm, meningitis, tuberculosis, syphilis and neoplasm.

The author reports a case of a woman of 51 who had a paralysis of these three nerves and also of the seventh. A month before the onset she had a severe attack of influenza with pain in the left ear and a facial paralysis. There was evidence of a previous otorrhœa on this side.

Examination showed an intact internal ear, middle-ear deafness, facial paralysis, and a positive Wassermann reaction. Local aural treatment and antispecific treatment resulted in cessation of the discharge in three weeks and complete relief of the facial paralysis. Four weeks later the patient complained of dysphonia, followed a few days later by dysphagia.

On examination, the left vocal cord was found to be completely immobile, and fluoroscopy revealed a very tardy emptying of the hypopharynx into the œsophagus. There was a paralysis of the left half of the larynx, the hypopharynx and the soft palate ; and a paresis of the left half of the tongue. The elevator muscles of the left shoulder were paralysed, and the left pupil was smaller than the right. There was a loss of sensibility of the corresponding areas in the throat, and the corneal reflex was reduced.

The author considers that the implication of this group of nerves VII, IX, X, XI, XII was due to an area of syphilitic basal pachymeningitis. It was possible to eliminate practically every other cause.

F. C. ORMEROD.

Dangerous Abnormality of the Internal Carotids. MAURICE ESCAT. (*Les Annales d'Oto-Laryngologie*, July, 1933.)

This abnormal course of the internal carotids occurs more frequently than is generally recognised. Its importance cannot be exaggerated when incising purulent collections in the retro-pharyngeal region. In every case the incision must be made in the middle line and particular note must be taken of any abnormal pulsation in this region. Whereas the normal course of the internal carotid above the bifurcation is a straight line in intimate contact with the inner surface of the internal jugular vein, in these cases the carotids leave the vein and incline upwards and inwards between the prevertebral fascia and the posterior wall of the pharynx in the

retro-pharyngeal space. At a point corresponding to the anterior surface of the axis vertebra they again pass outwards to regain their normal course in the retrostyloid region. Certain authors have alleged that these abnormal curves of the internal carotids are due to arteriosclerosis ; in the opinion of the writer this is not the case, as the abnormality is to be found in very young subjects.

M. VLASTO.

OBITUARY

DR. A. J. HUTCHISON

BY the sudden death, on October 20th, of Arthur Jaffray Hutchison, our specialty has lost a man of distinction, and many of us a good friend and counsellor.

Qualifying in 1890 at Glasgow University he studied subsequently at Vienna and then settled in Brighton where, until his retirement in 1930, he practised with great happiness and success, giving generously of his talent and energy to Clinics at the Sussex Throat Hospital and, later, at the Royal Sussex County Hospital.

In 1913 he acted as President to the Section of Otology and Laryngology at the Annual Meeting of the British Medical Association ; and for many years was Corresponding Member of the Société Française d'Otologie, de Laryngologie, et de Rhinologie.

He also took his share in work on the Councils of the Sections of Otology and Laryngology of the Royal Society of Medicine, and frequently contributed helpfully to the clinical discussions.

His personal influence was great ; it was based on fine enthusiasm and ability in his work, on the wide range of his extra-professional interests, and not least on the great kindliness of his nature.

D. A. CROW.