ABSTRACTS

EAR

A Clinical Study of the Past-pointing Test in Cases of Brain Tumour. LARS-ERIC MOBERG. (*Acta Oto-laryngologica*, Supplement xviii.)

This Supplement extends to 120 pages and includes a discussion of the literature and notes of sixty-four cases, in fifty-nine of which the diagnosis was verified by operation or *post mortem* examination.

The author attaches much importance to what he describes as past-pointing or deviation of the " frontal lobe type ". This is characterised by a bending of the arm at the elbow joint, so that the index finger deviates inwards and does not reach, as it otherwise would, the periphery of the circle as the arm is raised and lowered from the shoulder joint. The arm, besides, sinks slowly downwards or outwards and downwards. The finger thus tends to deviate inwards, when the outward sinking is more than counteracted by the bending of the arm ; or outwards, when the bending of the arm is outdone by the sinking outwards. The pointing movements are executed somewhat sluggishly and, after one or two repetitions of the pointing, the arm assumes a position similar to that adopted during the carrying out of the test.

The author has applied to this the term " deviation or past-pointing of the frontal lobe type " because he first observed it in cases of frontal lobe tumour. It was present in fourteen of his sixty-four cases, and in twelve of the total number the tumour affected the frontal lobe to a high degree. In ten of these twelve, past-pointing or deviation of the " frontal lobe type " was present. It was present also in two of six cases in which the tumour occupied mainly the temporal lobe, and in two others, in one of which the motor region was involved, and in the other the brain stem and thalamus.

The " frontal lobe type " of deviation, except in one case in which the tumour was in the mid-line, always affected only the contra-lateral arm.

Pathological past-pointing of other than the " frontal lobe type " is often associated with tumours situated in or in contact with the cerebellum, and in such cases the past-pointing usually affects the arm on the same side as the tumour. It does not seem to occur in tumours of the vermis unless there is also involvement of one or both of the hemispheres. In all cases of cerebellar tumour a

characteristic caloric past-pointing reaction could be elicited, and this was true also of all cases which were examined after operation, even when large parts of the cerebellum had been removed.

THOMAS GUTHRIE.

A new simple ear-loupe especially suitable for the examination of infants. RICHARD LEDERER. (*Münch Med. Wochenschrift*, Nr. 33, Jahr. 78.)

The instrument has been especially designed to enable the pediatrist to overcome the inherent anatomical and physiological difficulties which attend the clinical exclusion of latent otitis in infants.

It consists of a rectangular metal plate with a central circular opening to correspond with the opening in the frontal mirror. It is fixed to the back of the latter by means of two wire springs which terminate in claws. The bi-convex lens of $4\frac{1}{2}$ diopters slides into a metal fork, which latter is fixed by a point to the back of one corner of the metal plate and is capable of being rotated in front of the central aperture at will.

An illustration of the loupe, which may be obtained from the firm of Carl Zeiss in Jena, accompanies this descriptive article.

J. B. HORGAN.

The Treatment of Meningitis and Cerebro-spinal Diseases by means of Intrathecal (lumbar) Injections of Solganal. FRANZ GEBENEGGER. (*Wiener Klin. Wochenschrift*, Nr. 8, Jahr 46.)

The injections were undertaken in fourteen patients. Recovery occurred in two cases of lymphocytic and in two cases of suppurative meningitis. Of the former, one was certainly a tuberculous meningitis in a girl aged 21. This case is detailed, as also is one case of suppurative and one case of serous (tuberculous ?) meningitis which recovered. Two other cases in which the remedy was unsuccessfully employed (a case of meningitis secondary to a glioma of the temporo-sphenoidal lobe and a case of epidemic cerebro-spinal meningitis) are also given in detail. In other cases improvement in the clinical symptoms and in the condition of the spinal fluid were observed to follow the injections. The injections of Solganal in doses of 0·01 to 0·1 gm. were made daily or at longer intervals. The largest total amount injected in any one case was 0·9 gm. In most cases, especially with the larger doses, a febrile reaction occurred which rarely lasted more than a day. It was customary, except in very bad cases, to withhold further injection until the temperature had returned to normal. Renal suppression and hæmaturia may result from the drug. The former was attributed to the quick repetition of the lumbar puncture, the latter to the influence of the gold upon the vesical vessels. These symptoms

disappeared at once if the treatment was interrupted, and it is suggested that they can be entirely avoided by suitably spacing the doses.

The results are sufficiently encouraging to merit further trial in cases of meningitis and also in cases of spastic spinal paralysis and the post-encephalitic Parkinsonian syndrome.

J. B. HORGAN.

Problems Concerned with Empyema of the Petrous Apex. SAMUEL J. KOPETZKY. (*Archives of Otolaryngology*, July, 1933.)

At the outset Kopetzky deals with the confusion which has arisen between the Gradenigo syndrome and suppuration of the petrous bone. Paralysis of the *nervus abducens* may accompany suppuration of the petrous pyramid, but the absence of this symptom does not preclude a lesion of the pyramid and it has been found in a minority of the author's cases. All anatomists are now agreed that a certain percentage of petrous pyramids are pneumatised. Naturally osteomyelitis cannot occur in pneumatised bone and the cases described by Kopetzky are cases of coalescent osteitis. Suppuration in the mastoid process precedes the petrous suppuration, and in most cases the mastoiditis clears up and an interval of time elapses before the petrous suppuration becomes manifest. The otorrhœa reappears and its origin cannot be traced to the mastoid. The cases may be grouped as: (1) Acute, with dramatic symptoms ending in meningitis unless relieved, and (2) Chronic, when a fistula leads from the pyramid to the tympanic cavity and so gives rise to persistent profuse otorrhœa. The acute cases commence during convalescence from acute mastoiditis with pain in the eye, sudden profuse discharge, rise of temperature and labyrinthine irritation. The difference between acute and chronic cases is really one of degree. X-ray examination after injection of iodised poppy seed oil gives definite data on which diagnosis can be based. The writer goes on to discuss the operative methods of Voss, Frenckner, Ramadier and Eagleton. His own technique (described in a previous paper) aims at the drainage of an encapsuled area of pus at the petrous apex. The point of spontaneous egress for pus at the petrous apex is *viâ* the peritubal cells and this is the route followed in the author's operation. It is the route indicated by Nature, but is not applicable if there is already an adequate fistula in the epitympanic space close to the superior semi-circular canal. If an epidural abscess has formed it should be drained by the subdural route in addition to opening into the mastoid tip. Further, no injury to the facial nerve, cochlea, or carotid artery occurred in any of the cases submitted to operation.

DOUGLAS GUTHRIE.

Ear

" Ultra Sound-Waves " in the Treatment of Chronic Deafness. O. Voss. (*Arch. Ohr-, u.s.w., Heilk.*, 1933, cxxxv., 258-87.)

In a previous article Professor Voss has described the apparatus used in the production of high frequency sound waves, which was designed by the electrical engineer Mülwert, and its use in the treatment of deafness. Many astonishing results were obtained. The author, therefore, continued his investigations and now reports on some four hundred cases.

There is no doubt that we have here a new method of treatment, producing results which one is unable to obtain along orthodox lines. Professor Voss's attitude is extremely critical all through.

The effect of pure suggestion has been absolutely excluded. The sound waves used are beyond the range of hearing, so that the patient has no special sensation beyond noticing the slight noise of the motor. Some patients were " treated " without the " Ue-waves," but with the motor going. No change in the hearing resulted. Subsequently the same ear was treated by the " Ue-waves " with improvement in the hearing.

The cases which can be improved are those of chronic middle-ear catarrh, the deafness due to healed suppurative otitis, or after the radical mastoid. Generally speaking, the cases classified as otosclerosis do not respond. The good results in some patients lasted up to four years, in others the improvement was temporary. Subsequent courses of treatment may or may not improve the hearing again. Tinnitus is completely or partly relieved in many cases.

An extremely interesting suggestion as to the action of the " Ue-waves " has been made by R. Stern. Certain colloid " gels " can be made fluid by the passage of these high-frequency sound waves. Perhaps the improvement in hearing and relief of tinnitus may be explained by an alteration of the viscosity of the endolymph.

It should be mentioned that there are many points of resemblance between the new treatment advocated by Professor Voss and the Zünd-Burguet vibromassage. The chief difference is that the Mülwert apparatus uses high-frequency sound waves which are beyond the range of hearing.

J. A. KEEN.

Disturbances of the Cochlear and Vestibular Functions in Diseases of the Brain. J. KOCH. (*Arch. Ohr-, u.s.w., Heilk.*, 1933, cxxxv., 232-57.)

This is a lengthy article in which the author analyses disturbances of the senses of hearing and of balance in diseases of the central nervous system, mostly tumours (twenty-three cases).

Disturbances of hearing were found in twelve cases out of twenty-three. The cochlear function is affected only in cases in which the disease process has actually compressed the cochlear nerve or

damaged it in some other way. Therefore patients suffering from frontal lobe or pituitary tumours, disseminated sclerosis, etc., do not as a rule complain of deafness or tinnitus.

On the other hand, disturbances of balance were present in all the cases, the labyrinthine tests showing increased or diminished vestibular excitability on one or other side. The vestibular nerve or its medullary centres can therefore be affected by disease processes at some distance away (" Fernwirkung "). Latent nystagmus may be discovered by the head-shaking test (" Kopfschüttelversuch ") and this test is particularly useful for detecting an increased excitability of the sense of balance.

J. A. KEEN.

Pathology and Clinical Features of Otogenous Cerebellar Abscesses. E. GRABSCHEID. (*Arch. Ohr-, u.s.w., Heilk.*, 1933, CXXXV., 160-86.)

The author describes four cases of cerebellar abscess following acute and chronic suppurative otitis, all of which ended fatally. Sections of the cerebellar abscesses and of the temporal bones are reproduced in the text and there is an extremely careful study of the pathways by which the infection had reached the cerebellum. The cases are unusual in many respects.

In two of the patients the cerebellar abscess followed an acute and a subacute otitis respectively. In the other two the abscesses were complications of chronic otitis with cholesteatoma. In all previous series there were always many more cases following chronic otitis.

In Case I cerebellar symptoms began twenty-four days after the onset of the otitis. The *post mortem* examination after a further two weeks' interval showed a small cerebellar abscess with definite abscess walls (*not encephalitis*); this abscess must have formed in the short period of two weeks.

Sinus thrombosis did not precede the formation of the cerebellar abscess in any of the cases. Other observers have laid great stress on sinus thrombosis as a complication preceding the cerebellar abscess. An inner-ear infection occurred in one of the four cases previous to the cerebellar abscess. A pachymeningitis of the posterior fossa was present in three out of four cases and formed the intermediate lesion.

Spontaneous nystagmus occurred early in Case I and persisted until death. In Case II, with a subacute middle-ear inflammation of the mucosus type, nystagmus was present only one day before death. There was no nystagmus in Case III, and in Case IV there was an intermittent nystagmus eight days before death. Nystagmus, as well as other cerebellar symptoms is more likely to arise in cases following acute otitis than in those in which the cerebellar abscess develops slowly. J. A. KEEN.

Ear

The Distribution and Situation of the Cartilaginous "Interglobular Spaces" in the human labyrinth capsule. LOTTE STEINBERG. (*Arch. Ohr-, u.s.w., Heilk.*, 1933, CXXXV., 187-96.)

The author studied serial sections of thirty specimens of temporal bones cut horizontally and of ten specimens cut vertically. The object of the research was to determine whether the "interglobular spaces" favour certain parts of the labyrinth capsule, as maintained by Mayer and other observers. Also whether these cartilaginous remains are grouped according to any kind of regular plan.

Manasse first described the interglobular spaces as characteristic of the labyrinth capsule, and there is general agreement that these embryonic remains are due to the fact that the labyrinth capsule has completed its development during fœtal life.

Dr. Steinberg agrees, on the one hand, that certain areas of the labyrinth capsule are especially rich in interglobular spaces, e.g., near the ampullae, at the tip of the cochlea and at the level of the round and oval windows. On the other hand, she does not find that there is any kind of regular arrangement. In some specimens the interglobular spaces certainly appeared to be arranged in layers parallel to the surface of the labyrinth (Mayer), in others the arrangement was quite irregular. J. A. KEEN.

The Microscopic Structure of the Ossicles and their Development. F. OESTERLE. (*Arch. Ohr-, u.s.w., Heilk.*, 1933, CXXXV., 311-27.)

"Interglobular spaces" or remains of primitive cartilage are characteristic of the labyrinth capsule. They do not occur in bone anywhere else, with the exception of the auditory ossicles, which resemble the labyrinth capsule bone in this respect. The most likely explanation is that the labyrinth capsule and the ossicles have reached their full development before birth. Therefore there is a persistence of certain embryonic features which in long bones have become lost in the course of further development.

These special features in the histology of the ossicles were studied by the author in serial sections of thirty temporal bones of all ages, and numerous sections and diagrams appear in the text. The malleus and incus are considered together, the stapes in a separate chapter. The descriptions of the morphology and development of the stapes are particularly clear.

The arrangement of the fibrous element of the bone is also fundamentally different from that found in ordinary long bones. In the labyrinth capsule and auditory ossicles the fibrils are not arranged in the form of lamellae, but they form comparatively large bundles which are interwoven with each other in irregular whorls ("Strähnenknochen"). Special staining methods are necessary and the

differences between " Strähnenknochen " and the ordinary lamellary bone are best studied with the binocular microscope. In " Strähnenknochen " a horizontal section gives practically the same appearance as a vertical section. J. A. KEEN.

X-ray Diagnosis of the Gradenigo Syndrome. H. EPSTEIN. (*Arch. Ohr-, u.s.w., Heilk.*, 1933, cxxxv., 351-8.)

The author describes a case of Gradenigo's symptom-complex in which the diagnosis could be made by the X-ray examination. On the healthy side a large pneumatic cell was present near the tip of the pyramid. On the diseased side (right) the tip of the pyramid was completely absent ; in its place was a large bone defect attributable either to an abscess or to an inflammatory decalcification (see illustration in text). This appearance was found seven weeks after the onset of the otitis, when the symptoms were already subsiding. No operation was necessary and the child recovered completely.

Eleven months later the right temporal bone was again examined and the X-ray photograph showed that the tip of the pyramid had become normal again. The X-ray technique is discussed and the literature on the subject is reviewed. J. A. KEEN.

The Vertical Semi-circular Canals in the Light of Recent Work. W. J. MCNALLY. (*Annals of O.R.L.*, 1933, xlii., 82.)

In this communication an attempt is made to demonstrate the importance of the vertical semi-circular canals in controlling the normal tone and posture of the head, especially during movement.

The reaction from a normal vertical canal is immediate and so designed as to maintain the head in the horizontal plane. Careful observation of a frog with a single vertical canal lesion reveals the fact that, on coming to rest after any movement, the animal is very likely to have a downward bend of the head on the corner of the affected canal, e.g., if it is a right anterior vertical canal, the right fore corner of the head is slightly down. This is not a forced position because the frog can alter it at will. Such a frog hopping about will be liable to stumble in the direction of the absent canal and, on jumping, would tend to land on the damaged corner, so to speak.

If the two anterior canals are absent the frog will sit with his head down, whilst absence of the posterior canal will cause it to sit with its head up ; an animal with this latter lesion, on attempting to jump, will sometimes turn a somersault backwards.

In an animal with all four vertical canals removed, stumbling forwards, backwards, or from side to side may occur during movement and, on coming to rest, the animal will sway backwards and forwards before assuming the resting posture of any of the missing canals. These swaying movements are even more marked in swimming. Removal of the utricle in such an animal will inhibit these

dipping and oscillatory movements, although the movements will be irregular.

The author concludes " It would seem that in the absence of the vertical canals the heads may move out of the horizontal plane and this allows the utricles to set up to and fro reactions, which are altogether disturbing to the animal. When the vertical canals are intact, the inital movement of the head out of the horizontal plane is prevented and the utricular responses are kept within normal limits. Each of the four vertical canals is a sentinel at its own corner of the head, and acting together with the utricles in control of the head, body and limb musculature, they maintain the normal erect posture of the head during movement or at rest."

E. J. GILROY GLASS.

LARYNX AND TRACHEA

Carcinoma of the Trachea. WOLFGANG TILING. (*Monatsschrift für Ohrenheilkunde*, March, 1933, 25.)

Prefaced with an historical summary of instances of this pathological lesion as hitherto published, the author gives a detailed description of the case of a man, aged 56, whom he first saw on August 18th, 1931, and whose symptoms dated from an attack of influenza in 1930, which was associated with a severe bronchitis, followed by persistent cough and occasional blood-stained expectoration.

In March, 1931, difficulty in breathing began to develop. His symptoms increased to such an extent that he was awakened at night and had to sit up in bed, and it was for these reasons and the feeling as of a foreign body in the throat, that he sought relief. Apart from these symptoms nothing abnormal could be found on general examination, nor had his own or family history any bearing on his complaints, except that both parents were stated to have died of pulmonary tuberculosis.

The nose, post-nasal space and pharynx were all normal except for a deviation of the septum, nor could anything abnormal be detected on inspection of the larynx. Below the glottis, however, a reddish tumour could be seen. A direct tracheoscopy was therefore undertaken, when the tumour appeared to be growing from the left postero-lateral wall of the trachea, immediately below the glottis and almost completely occupying the lumen.

Diagnosis : probable malignant neoplasm in the upper third of the trachea. Specimen taken from the growth was reported on as consisting of basal-celled carcinoma.

Operation : (morphia and scopolamine and local anæsthesia) exposure of the trachea corresponding to the upper seven rings. On opening the trachea in the middle line, the tumour was found in the

situation described above, but reaching down to the level of the seventh tracheal ring. Application of cocaine and adrenalin—circumcision of the tumour (about the size of a cherry) through the surrounding healthy mucous membrane, followed by removal with a raspatory. The cartilage of the rings did not appear to be affected. Hæmorrhage was very slight. The outer aspect of the trachea was then packed off from the mediastinum, another dressing was laid over the intra-tracheal wound, a tube inserted and the skin wound closed. Fourteen days later, radium treatment was undertaken. Convalescence was uneventful and no recurrence could be detected at the end of October, when the patient had gained 4 kg. in weight. After recovery from the operation, he had been quickly able to carry on his work.

The description is followed by a discussion of various similar cases and terminates with tables on the age of incidence, histological peculiarities, site and metastasis from the accounts of similar cases which the author has been able to collect, and a bibliography.

ALEX. R. TWEEDIE.

The Operative Treatment of Congenital Laryngeal Web. GEORG KRIEGSMANN. (*Zeitschrift für Hals-Nasen-und Ohrenheilkunde*, 1933, xxxiii., 218-22.)

Only one case is described. Under Avertin anæsthesia the membrane was completely excised from the free margin of the vocal cords and the base of the web in the anterior commissure was punched out and curetted. Six days later a recurrence was noted, which was similarly treated. This again reformed and the web returned to its pre-operative condition in three weeks. Diathermy excision with coagulation of the edges was then tried, but in five weeks the membrane returned. Finally a fair result was obtained by simple incision in the mid-line and the daily passage of bougies (he does not say for how long). The author regards this last method as the simplest and most satisfactory.

For those unusual cases which present a very thick adherent membrane, he recommends laryngo-fissure with the submucous excision of the muscle fibres contained in the web and the sewing back of the epithelium above and below the margins.

H. B. LIEBERMAN.

TONSIL AND PHARYNX

The X-ray Treatment of Tonsils in Children. HELMUT ZÖPFFEL. (*Münch. Med. Wochenschrift*, Nr. 44, Jahr. 79.)

The writer alludes to the conflicting opinions which have been expressed by the German pediatrists, otologists, and radiologists as to the efficacy of this form of treatment. He has therefore

tried out the method in fifty children between the ages of two and ten years of age. The children were typical cases of enlarged tonsils and adenoids with all the resulting symptoms. He divides the cases into those in which the tonsils were soft (prevalence of lymphoid tissue) and hard (prevalence of supporting fibrous tissue). A description of the radiological technique employed is given. The radiation of each tonsil and the adenoid mass took place at intervals of, on an average, five to six weeks. Dryness of the mouth was complained of in two cases after radiation, but disappeared in two days. The majority of the cases had only two exposures per tonsil though a number had three and one had four.

In percentages 76 per cent. of those treated were of the hyperplastic (soft) variety and 24 per cent. of the fibrous (hard) variety. Judgment of the result, which was made upon purely clinical grounds, showed that 68 per cent. of the former and 25 per cent. of the latter were radiated with success, whilst in 32 per cent. of the former and 75 per cent. of the latter there was little or no success. Those children who, apart from the usual obstructive symptoms, suffered from recurrent anginas and catarrhal infections, marked loss of appetite and lassitude are considered in a special category. These cases constituted 37 per cent. of the hyperplastic cases (7 per cent. unsuccessful) and 32 per cent. of the fibrous cases (50 per cent. unsuccessful). The writer concludes that the method is out of place as a therapeutic agent in the case of hard fibrous tonsils but that it has definite utility in the case of soft hyperplastic tonsils, especially in anxious, nervous, or easily shocked children. After an interval of almost two years the writer has not observed any injurious results following radiation. J. B. HORGAN.

The Problem of the Supratonsillar Fossa. M. SASAKI (Mukden). (*Arch. Ohr-, u.s.w., Heilk.*, 1933, cxxxiv., 89-93.)

The author would like the name *fossa supratonsillaris* changed to *fossa tonsillaris superior*. This short anatomical research includes several good illustrations and diagrams. The author shows that the " supra-tonsillar " fossa does not lie above and outside the tonsil and its capsule, as the name would imply, but that it is incorporated in the tonsil substance. The so-called " supratonsillar fossa " is only a particularly deep and wide crypt near the upper pole. J. A. KEEN.

Hæmorrhage following Tonsillectomy. B. DANELIUS. (*Acta Oto-laryngologica*, xix., Fasc. 1.)

Bleeding, which became evident soon after the operation, occurred in twenty-four out of 800 cases of bilateral tonsillectomy performed by the author in three years (1930-2). In two others

secondary hæmorrhage occurred on the fifth day. In five of the twenty-six cases the bleeding was severe, but not so severe as to cause immediate danger to life. All the operations were performed in the author's consulting room, and the patients remained for three hours afterwards in a recovery room. The operations were done by forceps dissection, with snare or scissors to divide the pedicle, and were all carried out with the patient in the sitting position. Bleeding was more frequent in the adults, who were almost all operated on under local (novocain and adrenalin) anæsthesia, than in children for whom a general anæsthetic was used. It was four times more frequent in males than in females.

Treatment usually consisted of passing a catgut suture under and tying it round the bleeding spot, and the author describes and illustrates a special needle holder and forceps for this purpose. This is usually done under local anæsthesia by injection. Suturing the pillars is unreliable and seldom required.

Hypodermic injections of hæmostatic preparations has proved valueless, but blood transfusion has been successful in bad cases.

Although the percentage of post-operative bleeding is less than it was two or three years ago, the author fears that he must in future expect bleeding in 2-3 per cent. of his cases. These, being in some way predisposed to bleed, will do so in spite of every precaution.

THOMAS GUTHRIE.

Dissection or Diathermy of Tonsils? E. PAYTEN DARK. (*Medical Journal of Australia*, June 24th, 1933.)

Although the writer admits that the destruction of tonsils by diathermy is slow, difficult, and sometimes painful, he believes that it is in most cases the best method because "it never kills the patient". In the dissection method the advantages of speedy and complete removal may be outweighed by the drawbacks of pain, hæmorrhage, anæsthetic risk and loss of time to the patient. Diathermy may be slow and tedious, and its technique often difficult, but the patient loses no working time and no blood, and suffers little pain, while the tonsils are completely removed and there is no mortality. Anæsthesia for diathermy is secured by clamping against the tonsil for ten minutes a cotton wool pad soaked in Wingrave's solution (of cocaine, adrenalin and morphine). The needle electrode, insulated to within $\frac{1}{8}$ inch of its point, is introduced, and the current passed until the tissue around the needle whitens. Until one gains experience it is well to be content with three or four insertions of the needle at a sitting, and one tonsil only should be treated each week. In the later stages it is necessary to retract the anterior pillar, so that the last vestige of lymphoid tissue may be reached. The writer gives no statistical table of his results.

DOUGLAS GUTHRIE.

Nose and Accessory Sinuses

Benign Tumours of the Tonsil, with Special Reference to Fibroma. H. J. HARA. (*Archives of Otolaryngology*, July, 1933.)

Tonsillar fibroma is rare. The tumour is usually pedunculated, pale red in colour, and seldom gives rise to any symptoms. The author gives an excellent summary of twenty-six cases and reports one of his own, occuring in a girl aged 7 years. The tumour involved the palate and strongly resembled a peritonsillar abscess. It was dissected out together with the tonsil without difficulty. It appeared to have originated from the capsule, was firm, white in colour and weighed 17 gm. The paper is illustrated by three photographs.

DOUGLAS GUTHRIE.

Amyloid Tumour localised to One Tonsil. H. H. MUTSCHLER. (*Zeitschrift für Laryngologie*, etc., 1933, xxiv., 228-45.)

The diagnosis of this extremely rare case was made only after surgical removal and microscopic examination of the tumour. The author discusses the occurrence of isolated amyloid tumours in the upper air passages with full references to cases previously reported.

In a second part of the article Dr. Mutschler deals with the pathology and biochemistry of amyloid deposits. The older teaching that chronic tuberculosis or chronic sepsis must precede the formation of amyloid tumours has to be modified to some extent. It is now believed that local irritation can occasionally alter the tissues in such a way that amyloid substance becomes deposited in the lymphatic spaces. This would occur only in rare cases predisposed to such a change.

The above patient with amyloid deposit in the right tonsil was a woman, aged 35, a worker in a cigar factory. It is suggested that tobacco dust was the cause of the local irritation.

J. A. KEEN.

NOSE AND ACCESSORY SINUSES

The Nasal Accessory Sinuses as Foci of Infection in Chronic Arthritis. LEE M. HURD. (*Annals of O.R.L.*, 1933, xlii., 39.)

Ten cases of chronic arthritis are described to illustrate the importance of nasal sinusitis as the causative septic focus. Of these cases seven had previously had their tonsils cleanly removed without benefit, a fact which—to quote the author—" might lead one to believe that too much stress had been put on the tonsils when in fact the nasal sinus was the factor which upset the patient's balance."

Diagnosis is made on the history and clinical examination, stress being laid on the appearance of the mucosa of the middle turbinate. Transillumination and X-ray examination are of some value but

cannot be relied upon except as a confirmation of clinical diagnosis. If they fail to confirm they must be ignored.

The commonest lesion found was a hyperplastic ethmoiditis, maxillary sinusitis being a close second. All cases were treated by operation. The results were excellent, seven patients being cured and two greatly improved, while one received no benefit.

E. J. GILROY GLASS.

Abnormally Wide Naso-Lachrymal duct in a Syphilitic Fœtus. H. RICHTER. (*Zeitschrift für Laryngologie, etc.*, 1933, xxiv., 199-207.)

The nasal tear duct begins to develop in the fifth week of embryonic life and the first sign is the appearance of an epithelial strand. The hollowing out of this epithelial strand begins in the third month, but the openings into the eyelids above and into the nose below do not form until the sixth or seventh months.

When examining a series of twenty-four fœtuses and infants affected by congenital syphilis, the author accidentally discovered in one of them a very wide and large nasal duct and tear sac on the right side. Enlarged models of the abnormal duct and of a normal one were constructed and are illustrated side by side.

The detailed embryology is fully discussed and various suggestions are made as to the possible causes of such an abnormality. Retention of secretion in the sac cannot be a cause, as the fœtus had not yet reached the stage at which the opening into the nose is established. Also the left side showed nothing abnormal.

J. A. KEEN.

Research on the Transmissibility of Ozæna from Man to Man. AL. COSTINIU and ST. POPIAN. (*L'O.R.L. Internationale*, 1933, xvii., 321.)

A series of experiments were carried out on a dozen subjects of different ages, all presenting a normal ear, nose and throat. In the first group, the nose was swabbed with crusts from a case of ozæna, but no change was noticed. In a second group, tampons soaked in an emulsion made from ozæna crusts were placed in the nose, but again no infection occurred. In a third and fourth group an inoculation of an emulsion of culture of ozæna was made under the mucosa of the inferior turbinal. These subjects had a rise of temperature with headache, rigors and, in two cases, vomiting, which lasted from three to five days. Local examination showed an intense congestion and inflammation of the mucosa, and on pressure, some pus from the site of inoculation. From this pus more or less the same organisms as had been injected could be grown, e.g. those of Löwenberg, Abel, Hoffmann and Perez, and mucosus capsulatus with associated staphylococci and streptococci. In a few days, however,

these symptoms had entirely disappeared and the nose had returned to normal.

It would appear, therefore, that neither is the condition in any way contagious nor are any of the organisms which have been claimed to be the cause of ozæna to be regarded as a specific for it. The author holds that the condition is essentially not bacterial in origin, and tends to support the opinion that it is due to an endocrine disturbance, probably pituitary.

E. J. Gilroy Glass.

Intranasal Encephaloceles. L. Natanson. (*Arch. Ohr-, u.s.w., Heilk.*, 1933, cxxxv., 103-11.)

The author discusses these rare congenital tumours, of which only sixteen cases have been described up to date, and reports one personal case in an infant, aged 1½.

The main points in the diagnosis, apart from the age of the patients, are as follows :

1. The simultaneous presence of external encephaloceles near the root of the nose.
2. Displacement of the nasal bones with a wide space between the eyes.
3. A close connection between the smooth tumour and the nasal septum, so that one is unable to get a probe between the swelling and the septum.
4. A flow of cerebro-spinal fluid from one side of the nose.
5. X-ray examination of the skull, which may reveal a gap in the cribriform area.

Puncture of the tumour or excision of a piece for examination are extremely dangerous procedures. Surgical interference with a view to removing the encephalocele must be refused under all circumstances.

J. A. Keen.

ŒSOPHAGUS AND ENDOSCOPY

An Apparent Congenital Atresia of the Œsophagus. A. Seiffert. (*Zeitschrift für Hals-Nase-Und Ohrenheilkunde*, 1933, xxxiii., 223-5.)

A new-born baby was admitted with persistent vomiting ; a barium photograph appeared to indicate that the upper part of the œsophagus ended blindly. After a preliminary gastrostomy (at the end of three days) endoscopic examination revealed an opening in the hypopharynx. Through this opening, the œsophagoscope was passed for a distance of 5 cm. : but the surrounding tissue was blood-stained and did not resemble an œsophagus, neither was there any communication with the trachea.

On withdrawal of the tube a normal larynx and trachea was demonstrated, as also was a normal œsophagus leading into the stomach. The child died of mediastinitis the next day.

The hypopharyngeal opening was evidently traumatic in origin and the mother confessed she had inflicted the wound with a pair of scissors. H. B. LIEBERMAN.

Removal of Foreign Bodies from the Peripheral Bronchi. A. SEIFFERT. (*Acta Oto-laryngologica*, Vol. xix., Fasc. 1.)

This paper deals only with foreign bodies of small size, which have become lodged in the fine peripheral bronchioles and cannot be brought to light by bronchoscopy.

A case is described in which, during cauterisation of a small vocal cord polyp, a piece of cautery point 26 mm. long and 2·5 mm. thick broke off and was inhaled into the right lung. Radiograms showed it low down in the periphery of the lung, but repeated bronchoscopies failed to disclose it and transthoracic bronchotomy was considered.

On his way to the author the patient made a railway journey, and another X-ray examination on his arrival showed that, as a result no doubt of the vibration during the journey, the foreign body had penetrated still deeper, so that bronchoscopic removal appeared to be quite out of the question. As, however, the vibration of the railway had caused the foreign body to change its position in a downward direction, it seemed likely that it might be made to move upwards by vibration applied with the body in the correct position. Two radiograms were taken at right angles to one another, one dorsoventral and one lateral. By combining the two it was found that the bronchiole in which the foreign body lay had an inclination of 45° to the middle line of the patient's body and was directed about 30° forwards. The patient was then placed in such a position, by raising the foot of the bed and by the use of cushions and sandbags, that the bronchiole containing the foreign body was vertical, with its mouth downwards. The author then shook the chest in the region of the foreign body and at the same time made the patient breathe and cough forcibly. After a few minutes the foreign body, which shortly before had presented an almost insoluble problem, was coughed out.

It is thought that this may prove a simple and safe method of dealing with many cases of small foreign bodies in inaccessible parts of the lung. The author is the more inclined to this view because he can recall several similar cases in which the foreign body, at first quite inaccessible to endoscopy, after a long railway journey in a recumbent position, came to lie in one of the larger bronchi and was easily seen and removed.

THOMAS GUTHRIE.

Miscellaneous

MISCELLANEOUS

Anæsthesia with Pre-Narcosis by Morphine and Paraldehyde. B. B. BENNETT and ERIC GUTTERIDGE. (*Medical Journal of Australia*, July 8th, 1933.)

The writers have made it a practice to supplement the use of local anæsthesia with preliminary administration of morphine and paraldehyde. An enema is given the night before operation. One hour before operation a hypodermic injection of morphine gr. $\frac{1}{4}$ and hyoscine gr. 1/100th is given, and fifteen minutes later paraldehyde ($\frac{1}{2}$ drachm for each stone of body weight) is dissolved in ten times its volume of normal saline and slowly injected *per rectum*. A distinct fall of blood pressure occurs in every case so that the method is not suitable in cases of coronary sclerosis and, as paraldehyde is excreted mainly through the respiratory system, the method is also unsuitable when fibroid changes are present in the lung. The writers have had only one death in 143 cases, the fatal case being one of a patient suffering from tuberculous laryngitis, who underwent tracheotomy. The method appears to abolish the strain and fear incident on operation and the patient remains drowsy during the unpleasant hours just following operation. It is, of course, essential that the recovering patient should be carefully watched until full consciousness returns. When a general anæsthetic is given the procedure is the same, and there has been less vomiting and less shock since this method has been adopted.

DOUGLAS GUTHRIE.

Resistance of the Upper Respiratory Mucosa to Infection. C. H. LINTON. (*Annals of O.R.L.*, 1933, xlii., 64.)

Experimental evidence shows that a sufficiently virulent strain of organisms may penetrate the normal respiratory mucosa without the aid of other influences tending to reduce resistance. A less virulent strain may fail to cause an infection when inoculated in the same manner.

Experiments were undertaken to determine the factors responsible for such an invasion. If a culture of the same virulent organism was washed free from products of its growth, penetration was not absolutely prevented, but the infection was less virulent and the incubation period was longer. Further, the author found that the products of bacterial growth had a deleterious effect on ciliary action, but the virulence of the bacteria could by no means be predicted from this effect of its toxin. It was evident, therefore, that the mere effects on ciliary action would not altogether explain the phenomena. He therefore turned to the mucous secretion. Although the exact effect of streptococcal action on the mucous secretion has not been determined, from clinical observations it appears that the

amount of secretion and its hydration is increased while its viscosity is reduced. This would have the advantage of a washing effect, but the decreased viscosity might permit of the penetration of bacteria to the cells of the mucous membrane, and infection through growth in this situation and subsequent destruction of cells.

A certain degree of resistance to infection was developed by making four to six inoculations with a specific vaccine. In none of these immunised animals was it possible to demonstrate agglutinins in the blood, which would appear to indicate that the increased resistance developed is largely local.

E. J. GILROY GLASS.

Lesions of the Upper Air Passages in Lymphatic Leukæmia. H. GLÜCKERT. (*Arch. Ohr-, u.s.w., Heilk.*, 1933, CXXXV., 135-59.)

Lymphatic leukæmia is divided into the acute and chronic forms and is one of the practically hopeless conditions in general medicine. Certain local symptoms, such as dyspnœa due to swelling of Waldeyer's ring, or severe bleeding from the nose or throat may bring such cases to the notice of the laryngologist.

The author discusses this aspect of the disease and illustrates his observations by the clinical description of four cases, two of acute and two of chronic lymphatic leucæmia.

In Case I (woman, aged 20) there were dark brown scabs on the upper lip, at the openings of the nose and on the hard palate. A swab showed diphtheria-like organisms. The blood picture gave the diagnosis.

Case II (girl, aged 14) showed diffuse enlargement of all the cervical lymphatic glands, left facial paralysis and great enlargement of the left tonsil with ulceration.

Both patients died from repeated severe hæmorrhages from the nose, throat and gums.

Case III (man, aged 69) required a tracheotomy on two occasions due to respiratory obstruction by a subglottic swelling which was first diagnosed as a laryngeal tumour. He died soon after the second operation.

In Case IV (woman, aged 55) the main clinical features were tumour-like swellings of the skin covering the nose and upper jaws on both sides (photographs in text). Some improvement resulted from X-ray irradiation of the long bones, but the patient soon relapsed.

J. A. KEEN.