Abstracts

Conversation voice, L. 1 metre; R. only shout close to ear. Weber lateralised to left; Rinné negative both sides; Bone conduction shortened on both sides.

On rotation, with the head erect or bending forward, no reaction was obtained in either direction, and these tests were only accompanied by very slight vertigo and falling tendency. On the other hand, rotation to the right with the head on the right shoulder, induced a downward directed nystagmus lasting 5 seconds, with marked vertigo and typical falling tendency; while rotation to the right, with the head on the left shoulder, induced an upward directed nystagmus lasting 4 seconds, with again marked vertigo and typical falling tendency.

Caloric reaction, with water at 18° on either side, induced a nystagmus which lasted about 1 minute 40 seconds, accompanied with giddiness, typical by-pointing, and typical falling tendency. The exact location of the cause of this nystagmus was difficult to suggest. The Wassermann reaction, oculist's and physician's report were negative, and as the character of the nystagmus as stated above had remained unaltered for ten years, it could not be attributed to such systemic diseases as multiple sclerosis, syringomyelia, or tabes. He suggested that the case was similar to one described by Fremmel and that the focus of infection was in the vestibular nucleus.

ABSTRACTS

THE EAR.

A Contribution to the Study of the Importance of the Auricle in Man. S. KOMPAGNÉETZ. LÈKATÉRINOSLAW. (*Acta Oto-Laryngologica*, March 1926, Vol. ix., Fasc. 1-2.)

After a detailed review of the literature on the subject the author describes a case of total loss of the auricle in a peasant aged 48, which occurred as the result of an accident. The external auditory meatus which remained was about the size of a pin head. After carrying out certain tests with a series of forks of the Bezold-Edelmann series he came to the following conclusions:

1. Although the auricle of man may be a rudimentary organ, yet it possesses a certain acoustic value.
2. The auricle exerts an influence on the perception of deep tones.
3. The cartilage of the auricle conduces to the better transmission of sounds of a pitch above g^3.
4. The auricle plays a certain part in the determination of the direction of sound.

H. V. FORSTER.

The Ear

The Treatment and Prevention of Ear Furunculosis. F. NOLTENIUS. (*Münch. Med. Wochenschrift*, Nr. 43, Jahr 73, S. 1796).

Noltenius finds that the application of dry heat is a valuable means of inhibiting and preventing all forms of meatal dermatitis. If possible the meatus is first thoroughly dehydrated by means of alcohol. The ear is then treated twice daily with intensive radiant heat. This can be best applied by means of the Sollux lamp. An almost equally effective result can be achieved by exposing the ear through an opening cut in a cardboard shield to a half-Watt electric lamp. The patient should approach so close to the lamp that he can just bear the heat. The immediate result is a momentary reduction of the pain. In the chronic cases the improvement is noticeable on the following day. In the acute cases there is often a temporary exacerbation. This should not deter the surgeon. On the third day without exception there is a rapid amelioration and absorption of the inflammatory foci. In another two or three days the meatus is quite healed. Recurrences have not occurred after this treatment. In especially severe cases, it is advisable to await a day or two before resorting to the heat therapy. Owing to the rapid result obtained, the method is of value in differentiating between cases of external otitis with massive swelling and mastoiditis.

J. B. HORGAN.

On Primary Tuberculosis of the Middle Ear. A. GHON and H. KUDLICH (Prague). (*Zeitschrift für Hals-, Nasen-, und Ohrenheilk*, Bd. xiv., Heft 1 und 2, p. 77.)

The case of a male infant who died at the age of 11 months of tuberculosis of the middle ear is described. The disease showed itself by a swelling behind the right ear when the child was six months old. This increased, facial paralysis supervened; radical operation revealed extensive necrosis with numerous large sequestra. At the autopsy there was found tuberculous lymphadenitis with caseation in the parotidean, retropharyngeal, superficial and superior deep cervical glands. There was doubtful tuberculosis of the pharyngeal tonsil. The ileum showed tuberculous ulceration with involvement of the associated glands. Any change in the lungs was slight and obviously of much more recent date than that in the ear which might properly then be called primary. The question as to the commencement in the mucous membrane (primary mucous) or in the bone (primary osseous) is discussed but it is left undecided which of these is the more frequent. It is urged that systematic examination of the appropriate material is still wanted.

JAMES DUNDAS-GRANT.

Abstracts

An Unusual Complication of Mastoiditis. F. W. WATKYN-THOMAS. (*Lancet*, 1927, Vol. i., p. 179.)

The author draws attention to a possible complication in diagnosis in cases of acute mastoiditis, viz: pointing of pus through the posterior wall of the meatus so that a furuncle is simulated. He cites three cases coming within his experience which have three points in common: 1. A mastoid infection without evidence of concurrent acute otitis media. 2. A fistula through the posterior bony wall of the meatus. 3. A high and deep antrum. In every case the pus reached the meatus via the "cellules limitrophes" of Broca.

MACLEOD YEARSLEY.

Discussion on After-Treatment and Results of the Simple and Radical Mastoid Operations. (*Brit. Med. Journ.*, 18th December 1926.)

BRITISH MEDICAL ASSOCIATION ANNUAL MEETING, NOTTINGHAM.

(I.) G. J. JENKINS, F.R.C.S.

The speaker confines himself to a consideration of the after-treatment of the Schwartze operation for acute mastoiditis, assuming that the operation has been performed with meticulous care and all diseased tissue has been removed. He emphasises the need for paracentesis of the tympanic membrane to allow of adequate drainage of the middle ear, if spontaneous rupture has not effectively achieved this end; also the clearing of the naso-pharynx of adenoids if such be present. Primary suture of the wound he reserves for those cases in which the cavity is of such a form that, after cutting away the bone-edges, the soft tissues fall in contact with the bone, leaving only a comparatively small cavity near the meatal wall.

In most cases the wound should be left open, either in whole or in part according to the size and form of the cavity and the presence or absence of exposed dura mater. Drainage through the meatus is not satisfactory for the lower part of the mastoid cavity, although the antrum and adjacent area may thus be successfully treated. After-treatment through the meatus may also be painful and unpleasant and the depression left in the meatus may be troublesome. In his own practice, even with a shallow cavity he prefers to leave the lower part of the wound open and where the cavity is large, no closure is attempted at all, the whole space being lightly packed with iodoform gauze. If there is any serious delay in healing, or if there is a tendency for epithelium to dip into the wound he performs secondary

suture. For this procedure he likes to see the communication with the middle ear shut off or at least almost completely closed.

A persistent sinus or fistula is due to an imperfect operation or imperfect treatment of the anterior part of the middle ear tract, and the question of infected tonsils and adenoids should never be forgotten in mastoid cases.

(II.) J. S. Fraser, M.B., F.R.C.S. Ed.

Dr Fraser deals with the radical and modified radical operations and points out that in chronic otorrhœa the most important point is the placing of the patient in a condition of safety; the questions of deafness and discharge are of secondary importance. Many cases could probably be cured of their discharge without operation if circumstances allowed of detailed conservative treatment being employed over a sufficient length of time. He reserves the modified radical operation for cases in which the affected ear has good hearing, or better hearing than the other ear. As the perforation in these cases is frequently in the attic region and associated with cholesteatoma there is a certain amount of risk in doing less than the complete radical operation, but the risk is justifiable and can be explained to the patient. The extent of bone removal in the modified operation will depend on the nature of the case—the outer wall of attic and aditus for instance being left untouched in the absence of cholesteatoma. In the radical operation Körner's meatal flap and skin grafting are advocated, the latter procedure yielding painless dressings, rapid healing, and better hearing.

In Edinburgh, printed instructions are given to the patient regarding the after-treatment of the healed cavity, as epithelial debris and wax are apt to collect and set up irritation. Among the causes of failure of the operation, failure to obtain closure of the Eustachian tube comes first; a faulty condition of the patient's general health, and narrowness of the meatus come next.

Some interesting statistics are given of after-results. After eliminating cases in which the radical operation was performed in the presence of complications, the mortality was less than 0.5 per cent. in 628 cases. Where immediate skin-grafts were applied hearing was improved in 61 per cent. and was worse in 14 per cent. When skin grafting was not employed hearing was better than before operation in 44 per cent., worse in 23 per cent.

(III.) Professor Heinrich von Neumann, Vienna.

Acute otitis media is an acute inflammation of the mucous membrane of the tympanic cavity, but it probably always extends more or less to the cellular structure of the mastoid process. The lining membrane of

the mastoid cells however is not a true mucous membrane. The modern view is that it is a muco-periosteum or endosteum. In the majority of cases of acute otitis media the mastoid inflammation resolves and the disease is limited to the middle-ear. At times, however, there is a progression of the inflammation in the cells and true osteitis results, which demands operation. Some slides are shown indicating the appearances found in different stages of this inflammatory process.

In the early stage thickening of the mucosa with cell-proliferation is seen, also some free pus in the cavities. In the canal-system osteoclasts are seen which have already destroyed the structure of the bone. In the intermediate stage cell-proliferation has proceeded further and has invaded the inflammatory exudate which is becoming organised. In the later stages rapidly formed outgrowths of spongy bone are filling the original cavities of the pneumatic cells. The more advanced the disease the more this irregular growth of bone is evident. There is no relation between clinical symptoms and histology. There may be most severe clinical manifestations with insignificant pathological changes and vice versa. The best time to operate is when the inflammatory process has subsided and before complications have occurred. The greatest percentage of complications occur during the sixth week and after. Most authors agree that operation should not be delayed beyond the third or fourth week of the disease. Against early operation is urged the tendency to open into healthy bone tissue, as it is difficult to distinguish between invaded and uninvaded bone at this stage. Further, the advocacy of early operation means that more operations will be performed, with all the attendant risks such as wounding the sinus, the dura mater, the brain or the labyrinth.

The author's own technique is described in detail. He attends first to the zygomatic cells, then to the cells lying behind the posterior wall of the meatus and running down to the tip and peribulbar cells, lastly to the marginal cells on the posterior portion of the mastoid process. Since adopting this detailed method there has been no need for secondary operations. If the sinus or dura mater has been exposed the wound is left completely open; otherwise it is closed in its upper part. Such an extended operation leaves a larger scar, but too much stress should not be laid upon cosmetic results.

Retro-auricular fistulæ are rarely met with. In the author's view they are due to an incomplete operation, the leaving of unopened cells and areas of diseased bone; such residues cause long persistence of a discharging wound and the ingrowth of epithelium into its cavity. A method of closing such fistulæ is described.

T. Ritchie Rodger.

The Nose and Accessory Sinuses

THE NOSE AND ACCESSORY SINUSES.

Surgery of the Frontal Sinus. T. S. KIRKLAND. (*Medical Journal of Australia*, 4th September 1926, Vol. ii., p. 313.)

This is a critical analysis of the different types of operation devised for the cure of frontal sinus suppuration. The Killian operation, which is suited for large sinuses, may fail because the orbital fat which ascends into the cavity may be insufficient to fill it and thus obliterate it. In small sinuses, Kirkland resorts to the radical operation. He removes all diseased lining membrane. He relates an interesting anatomical peculiarity found in one case where a vertical plate, incomplete below, divided the sinus into an anterior and posterior space.

A. J. BRADY.

A Case of Pneumococcal Meningitis originating from an Occult Sinusitis. ISABEL F. KING. (*Lancet*, 1926, Vol. ii., p. 545.)

The writer describes the case of a woman, aged 36, a case of dementia paranoides. No localising symptoms were found and she died in coma between three and four days after the onset of the meningitis. The autopsy revealed a diffuse generalised leptomeningitis, the tip of the right frontal lobe being adherent to the frontal plate of the ethmoid and to the cribriform plate. The right frontal, right ethmoidal, and the sphenoidal sinuses contained pus, the most marked sinusitis being the last named. It is stated that there were no signs or symptoms suggesting a sinusitis during life.

MACLEOD YEARSLEY.

PHARYNX AND NASOPHARYNX.

Tonsils and Adenoids in Children. W. SANGSTER. (*Medical Journal of Australia*, Vol. ii., 13th year, 6th November, p. 6121.)

The well-known symptoms and signs of adenoids are enumerated. The question often arises as to the age at which adenoids ought to be removed. There is no definite age; any age when they cause symptoms is the best age, even in infants a few months old. Ear symptoms are a definite indication for removal. Adenoids do not recur, if completely removed, with the possible exception of those cases in which the child is under two or three years of age at the time of removal.

The removal of tonsils should not be recommended unless a definite indication exists. It is rarely necessary to remove tonsils under three years of age. When removal of tonsils is necessary, complete removal should be practised in every case.

Abstracts

When adenoids are removed should the tonsils be removed as well, although they have caused no trouble in the past? No, if a definite indication is not present. A year or two later the tonsils may cause trouble and require removal. A. J. BRADY.

The Importance of Chronic Tonsillitis as a Cause of Chronic Nephritis. Dr WICHERT. (*Münch. Med. Wochenschrift*, Nr. 46, Jahr 73, S. 1926.)

Working in conjunction with the leaders of the clinic of medicine at Mannheim, Wichert has removed the tonsils in 27 cases of chronic nephritis; of these, 9 were cured, 4 were considerably improved and practically cured, whilst 11 cases were uninfluenced.

The results of their observations have convinced Wichert and his colleagues more and more that, in the absence of some important contra-indication, the tonsils should be removed in all cases of chronic nephritis. They should be removed even in those cases in which the condition of the tonsils, on examination, does not support the supposition of their causal relationship with the existing nephritis.

By adopting this procedure success will be achieved in more than 50 per cent. of cases, a result which cannot be achieved by any other method of treatment. J. B. HORGAN.

Infections and Constitutional Polyarthritis (*Investigations into the Leucocyte Blood Picture as an Aid to the Indications for Operative Treatment*). REIDAR GORDING and HAKON BJORN-HANSEN. Oslo. (*Acta Oto-Laryngologica*, Vol. viii., Fasc. 1-2.)

In an earlier work on rheumatic affections and their relations to tonsillogenous infections, Gording came to the conclusion that, in the majority of the 260 patients examined, there were not sufficient grounds for assuming tonsillogenous infection. He urged, therefore, the inadvisability of carrying out stereotyped tonsillectomy in rheumatic cases unless the history of the illness, supported or not by the objective condition, points to tonsillogenous infection. Gording insists that even in cases apparently tonsillogenous in nature there are probably a number in which a constitutional factor is most important. There is a difficulty in determining which cases are infective and which are not.

In a series of blood investigations, which work had not yet been concluded, interesting but imperfect results were obtained. The conditions under which and the methods by which the leucocyte counts were taken are described.

The blood of 25 patients suffering from polyarthritis was examined. In six of the cases a characteristic blood picture of infection was found and a detailed description of the six cases with tables of their leucocyte counts are given. A summary is afterwards given of the leucocyte

counts taken in the six cases before and after the tonsil treatment. A table of differential counts in cases of chronic tonsillitis without joint symptoms is also shown, and a table in cases of primary polyarthritis with no ground for assuming tonsillar origin. Concerning the results of their investigations the authors are cautious in drawing conclusions. Only on the basis of the blood picture can we label cases of polyarthritis as those in which infection is in some way or another playing a part.

On the other hand, concerning the nineteen other cases with a normal blood picture, we cannot yet say how far we may diagnose pure constitutional polyarthritis and exclude infective origin. We can only emphasise the probability of its absence.

H. V. FORSTER.

The Technique of Local Anæsthesia in Tonsillectomy. H. BURGER, Amsterdam. (*Acta Oto-Laryngologica*, April 1926, Vol. ix., fasc. 3).

In tonsillectomy local anæsthesia is preferable to general anæsthesia. A complete anæsthesia is obtained by a single injection of 15 c.c. of a 1 per cent. solution of novocain with the addition of adrenalin, the injection operating above the tonsil. The point of the needle should penetrate outside the tonsillar capsule. Thus one renders anæsthetic the glossopharyngeal nerve and one can at the same time carry out the removal of adenoid vegetations. Injection into the tissues of the pillars of the fauces should be avoided. A preliminary swabbing with cocain is superfluous. At Burger's clinic by this method and without general anæsthesia even children of five years old have been operated upon without pain.

H. V. FORSTER.

PERORAL ENDOSCOPY.

Injected Iodized Oil in Roentgen-Ray Diagnosis of Laryngeal, Tracheal, and Broncho-Pulmonary Conditions. SAMUEL IGLAUER, M.D., Cincinnati. (*Journal Amer. Med. Assoc.*, Vol. 86, No. 25, p. 1879, 19th June 1926).

The author uses lipiodol as recorded by Sicard and Forestier, but has also had equally good results with a German preparation called "iodipin." Various methods of injecting the oil into the lung are discussed, including laryngeal syringe, puncture through the cricothyroid membrane, bronchoscope, and swallowing, but the author has devised a technique of his own. He uses a modified O'Dwyer laryngeal intubation cannula. The cannula has a main channel for breathing,

and a secondary small canal for injecting the oil. The smaller channel is connected by means of a rubber tube with a syringe, and the oil is injected along it into the bronchus. The position of the patient is changed in order to inject the different parts of the lung. The oil is used in diagnosis of bronchiectasis, lung abscess, cavitation, distortion and displacement of the trachea and bronchi, pulmonary fistulas, and new growths. The author also uses it for the purpose of studying the lumen in stenotic conditions of the larynx by injecting the oil and taking a picture while the oil flows through the stenosed area.

The dimensions of the narrowed subglottic lumen of the larynx in tracheotomised patients was demonstrated by X-ray as follows: "A finger cot was filled with a fluid contrast substance, and a string tied to each end of the finger cot. A probe, carrying a long string, was passed through the tracheal fistula into the pharynx and out of the mouth. The oral end of this string was then attached to one end of the finger cot, the tracheal cannula was reinserted and the finger cot was pulled into the larynx."

The author reports no fatalities, and found the oil well tolerated by the patients, but occasionally dyspnœa and fever ensued. The oil is very slowly eliminated, and traces have been noted over five weeks after the injection. The article is illustrated and has an extensive bibliography. ANGUS A. CAMPBELL.

ŒSOPHAGUS.

Benign Tumours of the Œsophagus. J. GUISEZ, Paris. (*Bulletin d'Oto-Rhino-Laryngologie,* May 1926.)

The author has observed six cases of these rare tumours among 3000 cases examined by the œsophagoscope since 1903. Three simple polypi, an inflammatory polypus, an angeioma, and a fibrous polypus were seen. A general review of reported cases is given.

E. WATSON WILLIAMS.

Cancer of the Œsophagus treated by Radium. J. GUISEZ. (*Bulletin d'Oto-Rhino-Laryngologie,* July 1926.)

A further series of six cases is added to the earlier reports of the author in 1924 and 1925 in this Journal. One or two years have elapsed since treatment was commenced; in four cases there had been complete restoration of deglutition, in two definite improvement. The cases earlier reported are mentioned. The technique consists in application of at least 0.1 gm. of radium, six or eight times, about once a week, for eight hours each time. With 2 mm. platinum

screens, there is no risk in an application which extends into the normal œsophagus above and below, and this should be a routine method. E. WATSON WILLIAMS.

A Case of Multiple Cicatricial Stricture of the Œsophagus in a Child; Failure of Dilatation; Urgent Gastrostomy; Natural Cure. VIGNARD and SARGNON. (*L'Oto-Rhino-Laryngologie Internationale*, July 1926.)

The treatment, by the passage of bougies, of a child, aged 4, with multiple strictures of the œsophagus following the swallowing of caustic potash, was interrupted by the sudden onset of complete obstruction.

An urgent gastrostomy was performed and was followed by such remarkable improvement that no further treatment was needed, showing that the greater part of the obstruction had been due to spasm. C. GILL CAREY.

MISCELLANEOUS

Intratracheal Extension of a Malignant Thyroid Tumour: Difficulties in Diagnosis and Treatment. W. METZKES, Marburg. (*Zeitschrift für Laryngologie, Rhinologie, etc.*, July 1926, pp. 351-55).

Patient, aged 63, was admitted with thyroid swelling, stridor and severe dyspnœa. With the laryngeal mirror one could see the tumour masses in the trachea. The diagnosis of secondaries from the thyroid tumour seemed clear at first, but when tracheotomy was done and the tumour masses removed, on section, they were found to be simple inflammatory polypi with an intact tracheal mucosa. Removal of the thyroid tumour was attempted, but could not be completed as the tumour adhered firmly all round the trachea.

Attacks of suffocation constantly recurred and required repeated curetting of the intratracheal polypoid masses. Only after a comparatively long period, when the clinical diagnosis could no longer be in doubt, did the polypoid masses in the trachea assume the microscopic characters of a parathyroid growth.

The interesting point is the inflammatory reaction of the tracheal mucosa to the invasion of a carcinomatous growth. Similar observations have been made in malignant disease of the nasal cavities; the polypoid masses which may be removed from the nose also frequently appear quite innocent under the microscope. In the treatment of this case all forms of tracheal tubes were found unsatisfactory. Relief could only be given by using a long rubber tube which reached well down into the trachea. J. KEEN.

Abstracts

Upper Respiratory Infection as a Cause of Cholera Infantum. PHILIP C. JEANS, M.D., and MARK L. FLOYD, M.D., Iowa City. (*Journ. Amer. Med. Assoc.*, Vol. lxxxvii., No. 4, 24th July 1926, p. 220.)

The authors report six cases of cholera infantum in children ranging from 4 weeks to 1½ years, whose symptoms were marked with rapid loss of weight, fever, diarrhœa, dehydration, and the appearance of intoxication. The cause is attributed to an upper respiratory infection in the sinuses, middle ears, and mastoids. It is stated that the infections in these areas is seldom obvious, and in two cases was found at the post-mortem. Establishment of adequate drainage of the site of the infection brought about complete recovery. These children were practically all bottle-fed. In discussing the paper Dr Mitchell, Memphis, said he did not consider drainage of the mastoid a minor operation, and unless careful analysis was made in each case, many mastoids were opened uselessly. Dr John Shae, Memphis, stated that children did not have acute empyema of the antrum such as is seen in adults; these show only mild changes, and diagnosis is very difficult to make, and really demands a little imagination. Dr Brady, St Louis, stated that infection in any part of a baby's body may be accompanied by diarrhœa, but great care should be taken to consider the previous condition of the child's constitution, the virulence of the infection, and the kind of food the baby has been using.

ANGUS A. CAMPBELL.

Scarlet Fever following Nose and Throat Operations. BEATRICE R. LOVETT, M.D., Chicago. (*Journ. Amer. Med. Assoc.*, Vol. lxxxvii., No. 2, 26th July 1926, p. 96.)

At the Durand Hospital between 1902 and 1926, of 47 cases classed as surgical scarlet fever, 20 followed operation, 13 of these being operations on the nose and throat. Of the 13 cases, 7 followed cleft palate operations, 2, resection of the nasal septum, and 4, tonsillectomy. The intervals between the operation and the first symptoms of disease were: in 2 cases, two days; in 6 cases, three days; in 2 cases, four days; and in 3, a few days. All patients had typical scarlet fever. The complications were unusually numerous, including 2 instances of bilateral otitis media, 2 of unilateral otitis media, and 2 of sinus infections, making a total of 6 complicated cases in a series of 13. The development of the disease in these patients may be coincident, but from their frequency, some relationship between the operation and the scarlet fever seems probable, and the author suggests the wisdom of testing and immunising patients beforehand, especially in cases of cleft palate operation.

ANGUS A. CAMPBELL.