ABSTRACTS

EAR.

Dental Otalgia. HANNA KRÜTGEN (Halle). (*Archiv für Ohren-, Nasen-, und Kehlkopfheilkunde*, 111 Bd., 2 Heft, December 1923.)

This contribution contains two anatomical drawings and a bibliography. The author is satisfied that dental otalgia generally originates in disease of the lower molars; namely, a chronic pulpitis, or less frequently, gangrene of the pulp, carious stumps and other rarer dental affections. Earache in connection with affections of the upper molars is often part of a facial neuralgia. The pain of dental otalgia is deep-seated and boring. It is generally intermittent, in contradistinction to that of otitis media, which gradually attains its maximum intensity. It radiates from the auditory meatus—sometimes also from the mastoid region—along the ramifications of the affected nerve. Implication of the auditory nerve may produce dysacusis. The referred pain exceeds that localised in the region of the affected tooth; hence its dental origin is liable to be overlooked. Among the instances cited is a classical case described by Thomas Bell. A patient had suffered for a year from paroxysms of pain radiating from the ear to the neck, shoulder, and entire length of the arm, impairing the mobility of the hand and fingers. Extraction of carious roots of the lower second molar resulted in complete relief.

WILLIAM OLIVER LODGE.

Pathological-Anatomical Investigation into Otosclerosis. DÖDERLEIN, Berlin. (*Zeitschrift für Hals-, Nasen-, und Ohrenheilkunde.* Bd. vi., Theil ii., p. 477.)

From a number of fully described and illustrated cases and specimens Döderlein forms the opinion that the bone changes in otosclerosis consist of numerous foci of softening and breaking-down without the operation of osteoclasts and substitution of new-formed bone, which persists for a long time in an incomplete osteoid condition; only at a very late period does it undergo calcification and contraction. The new-formed spongy bone-structure may gradually develop into compact bone. The process has a very close resemblance to that of rickets and osteomalacia, as revealed by staining with thionin. Such difference as there is, is to be explained by the structure of the capsule of the labyrinth differing from that of the other bones of the skeleton.

JAMES DUNDAS-GRANT.

Abstracts

A New and Simple Method of Detecting Feigned Unilateral Deafness. WALTER A. WELLS, M.D., Washington, D.C. (*Journ. Amer. Med. Assoc.*, Vol. lxxxi., No. 3, 21st July 1923.)

The author points out that the fatal weakness of most, if not all, of the various tests for simulation, lies in the fact that a previous knowledge of them enables a clever individual to anticipate our design and to avoid the pitfall which has been prepared for him.

Wells has devised a test obviating this defect. It is based on a well-established acoustic principle, viz., when the two ears are simultaneously exposed to sounds of identical pitch and quality but of different intensity, the sound is invariably referred to the side of greatest intensity. The original paper should be read to accurately follow the author's procedure. PERRY GOLDSMITH.

On the Demonstration of Residual Hearing. ERICH RUTTIN, Vienna. (*Archiv für Ohren-, Nasen-, und Kehlkopfheilkunde*, 111 Bd., 2 Heft. December 1923.)

In unilateral labyrinthine affections Ruttin has tested for residues of hearing by a method which has been investigated from the physiological side by Kreidl and Gatacher. Two medium tuning-forks of the Vienna pattern are used as follows:—

(*a*) One fork is vibrating at a fixed distance from the sound ear, the other is moved to and fro in the vicinity of a speculum in the diseased ear.

(*b*) One fork is fixed on the vertex, the other moved as before in the vicinity of a speculum in the diseased ear.

(*c*) One fork is fixed before the sound ear, the other alternately applied and removed at the vertex.

The results of these tests, and the manner in which they help to demonstrate whether a patient is hearing in one ear or in both is analysed in twelve cases. WM. OLIVER LODGE.

An Unusual Case of Mastoid Disease. T. L. ANDERSON. (*Medical Journal of Australia*, 3rd November 1923.)

In the case of a woman, aged 20 years, the illness began with pain in right ear, eight weeks before she came under treatment. This was followed by profuse discharge which was present on admission. There was slight pain over right mastoid, and also a fluctuating swelling over the right occipital bone. Operation—Usual mastoid incision. A fistulous opening was found in the antral wall: free discharge of pus on pressure over the occipital region occurred from this opening. An incision over the occipital bone at the centre of the swelling revealed an opening through the bone into the subdural

space. On further opening of the antrum, an aperture was found through the bone internal to the lateral sinus. The pus had travelled through the subdural space towards the occiput, and had perforated the occipital bone, causing a subcutaneous abscess. A rapid recovery is recorded. A. J. BRADY.

The Influence of the Vegetative Nervous System on the Excitability of the Vestibular Apparatus. DEMETRIADE and SPIEGEL, Vienna. (*Zeitschrift für Hals-, Nasen-, und Ohrenheilkunde*, Vol. vi., Part II., p. 472.)

When, on a guinea-pig, one common carotid was tied and both vertebral arteries were compressed and blocked at their exits from the foramina in the transverse processes of the atlas, stimulation of the branches of the sympathetic going to the other common carotid was carried out. It was found that the time required for the induction of the caloric vestibular reflex was prolonged. The duration of the nystagmus was not diminished. JAMES DUNDAS-GRANT.

On the Question of the Efficacy of Urotropine Injections in Meningitis. LEO BOSS. (*Archiv für Ohren-, Nasen-, und Kehlkopfheilkunde.* 111 Bd., 2 Heft.)

In 1916, Otto Sachs first administered urotropine intravenously in massive doses, eight to ten times as large as those formerly exhibited by mouth; namely, 20 to 30 c.c. of a forty per cent. solution, or 8 to 10 grammes.

Boss presents in tabular form the results of his examinations of urine, blood and cerebro-spinal fluid, after such injections. His main conclusions are as follows:—

1. Formaldehyde regularly appears in the urine and in the blood but never in the cerebro-spinal fluid.

2. The effective therapeutic dose depends on individual idiosyncrasy.

3. The impossibility of demonstrating formaldehyde in the cerebro-spinal fluid does not argue against its efficacy, since formaldehyde in the nascent state can act bactericidally and, soon after, become in part oxidised to formic acid, in part polymerised with albuminous bodies and in part excreted by the urine.

4. Intravenous administration is the most suitable.

WM. OLIVER LODGE.

Intracranial Tumours. H. S. SOUTTAR. (*Lancet*, xi., 1177, 1923.)

The author in an important lecture discusses, *inter alia*, acoustic tumours, which are the most characteristic and important of the subtentorial growths. They form 6 per cent. of all intracranial tumours, and the injury they produce is purely mechanical. Beyond

mentioning that the removal of such growths will tax to the utmost the resources of the surgeon, nothing is said as to treatment. The first symptom is unilateral deafness, possibly with vertigo. Soreness and stiffness of the neck are early features, probably from stretching of the tentorium. MACLEOD YEARSLEY.

THE NOSE AND ACCESSORY SINUSES.

Correction of Nasal Deformities. J. EASTMAN SHEEHAN, M.D., F.A.C.S., New York. (*Brit. Med. Journ.*, 24th November 1923.)

The author makes use of rib cartilage but inserts this through a vertical incision in the columella. The procedure is aided by photograph and plaster cast taken beforehand, and the cartilage is shaped as accurately as possible before insertion. If the septal cartilage is deflected, as much of it as may be necessary is resected through the incision in the columella. The rib cartilage has a triangular piece removed near its proximal end so that it can be bent to form a short limb for support of the tip. The perichondrium is retained at the bend to prevent breaking, and also on the short limb, so that its edges can be used for stitching to the deep tissue of the upper part of the philtrum, the intention being to avoid pressure on the original incision.

Loss of mucous membrane is made good by Thiersch's grafts, a small balloon being used, inflated, to keep the grafts in position. After deflation the balloon is removed in four days.

T. RITCHIE RODGER.

Deformities of the Syphilitic Nose. H. D. GILLIES, C.B.E., F.R.C.S. (*Brit. Med. Journ.*, 24th November 1923.)

In this paper, read to the Section of Laryngology and Otology at the British Medical Association Annual Meeting, the author classifies the deformities referred to, in three types:—

(1) Where a small amount of cartilaginous septum with mucous membrane is lost.
(2) The common type—loss of bony cartilaginous bridge combined with great destruction of the mucous membrane.
(3) The same type of destruction as in (2), with the additional destruction of some or all of the external skin.

He states that failure in previous lines of treatment for type (2) has been due to non-recognition of the loss of mucous membrane, with the consequent contraction and adhesions. The ulcerative process generally stops short of the more resistant skin at the vestibule which is found firmly adherent to the margin of the altered pyriform

opening. To bring the tip of the nose and the alæ into their normal positions, he divides freely their attachments to the underlying bone. Having done this, the nose can be pulled out "like a concertina" to its normal position, and it will then be found that there is a large raw area uncovered by any epithelium facing the nasal cavity. The mode of procedure is described in detail—the reference of the case first to a dental surgeon who makes a splint for the upper teeth—the use of dental modelling composition to maintain the Thiersch graft in position—the subsequent operation two months later for insertion of the cartilage support.

For type (3) shaped flaps are taken from the forehead or the arm to remedy the loss of skin. T. RITCHIE RODGER.

Asthma and Infections of the Accessory Nasal Sinuses. C. A. HEATLY and S. J. CROWE. (*Johns Hopkins Hospital Bulletin*, December 1923.)

So much attention has recently been directed to the rôle of foreign proteins in the causation of asthma that the part played by associated nasal conditions has assumed a place of secondary importance. Certainly, indiscriminate operations on the nose and accessory sinuses of asthmatics are to be condemned, but, in selected cases, such nasal treatment yields good results. The writers have made a careful study of 62 cases at the Johns Hopkins Hospital. The majority of patients (41) were males, 21 were females, and in 8, a family history of asthma was traced. Catarrhal symptoms and head colds were present in 60 cases. Headache was a troublesome symptom in only 2 cases. The most common pathological condition was nasal polypi which were found in 38 cases (61 per cent.) of the series. The ethmoids and antra were frequently infected (20 and 19 cases respectively), the sphenoids in 4 cases, the frontals in 2. Pansinusitis was present in seven patients.

Improvement followed operation in 53 cases, although in 14 cases a recurrence of symptoms appeared after temporary improvement.

The writers insist that if treatment is to be of any avail, it must be radical, particularly in case of nasal polypi.

"Relief of asthmatic symptoms corresponds in degree to the extent to which pathological conditions in the nose and sinuses have been improved." DOUGLAS GUTHRIE.

Canfield's Operation on the Antrum. Sir JAMES DUNDAS-GRANT, K.B.E., M.D., F.R.C.S. (*Brit. Med. Journ.*, 10th November 1923.)

It is claimed that the antrum in this operation being exposed at its anterior part, it is possible to introduce an irrigating cannula more

easily than after any of the other intranasal operations. The author's modifications are described in detail. The incision is made vertically along the fold corresponding to the bony ridge of the pyriform fossa, and the periosteum elevated for half an inch on the facial side of the ridge; then the mucoperiosteum is elevated for a similar distance on the nasal side and by chisel and bone-forceps the ridge is removed until the antrum is opened—the anterior end of the inferior turbinal having been first removed to facilitate access. A flap of muco-periosteum may be retained to cover the floor of the cavity but this is not essential.

Details of 10 cases are given as illustrations of the success of the operation. T. RITCHIE RODGER.

Painful Recurrent Catarrh of the Frontal Sinus. H. LUC. (*Archives Internationales de Laryngologie*, December 1923.)

The author refers to a type of frontal sinusitis which he believes has not previously been described.

He has observed this affection only in young women. The main clinical features of the cases are as follows: Recurrent attacks of unilateral pain; tenderness over one of the frontal sinuses with slight diminution of light on transillumination but without nasal discharge or swelling of the middle turbinate. Intranasal operation often repeated has failed to relieve the condition.

External operation showed that the mucous membrane lining the frontal sinus was covered by a brownish viscid secretion, which is only removed with difficulty. The complete eradication of this material, however, led to a cure. On bacteriological examination the secretion was found to be sterile. M. VLASTO.

Osteo-myelitis of the Frontal Bone, Secondary to Acute Infection of both Frontal Sinuses. CHARLES F. WARREN. (*Med. Journ. of Australia*, 10th November 1923.)

The notes concern a man, aged 19 years, who for three weeks after an external operation for acute double frontal sinusitis, progressed favourably—wound was healing and there was no pain. On the 21st day he was attacked by severe pain over the left frontal sinus. An incision evacuated an ounce of pus. Two days later patient was very ill. Bare necrotic bone was felt at the bottom of the wound. A vertical incision was made in the middle line from the junction of the frontal and parietal bones to the root of the nose; from the lower end of this a transverse incision was made as far as the outer angle of each orbit; each flap was laid back and the whole of the frontal bone exposed. The removal of the necrosed bone necessitated the removal of most of the frontal bone. The frontal lobe of the brain could be

seen beneath the dura mater. The flaps were sutured to the scalp over the parietal bones, and the whole wound left open. Warm "Eusol" dressings were applied every four hours. Recovery was uninterrupted; in a week's time the flaps were replaced but not sutured. "Eusol" dressings were continued. Patient made a complete recovery. The result is claimed to be due to the free removal of bone, and the open method of dressing.

A. J. BRADY.

PHARYNX.

A Milk-borne Epidemic of Septic Sore Throat in Portland, Oregon. R. L. BENSON, M.D., and H. J. SEARS, M.D. (*Journ. Amer. Med. Assoc.*, Vol. lxxx., p. 22, 2nd June 1923.)

An epidemic of 487 cases of septic sore throat, with twenty-two deaths, is discussed. Prompt detection of the cause resulted in checking further extension of the epidemic within twenty-four hours. The infection was traced to one milker's throat and a cow's infected udder. The hæmolytic streptococcus was isolated from the milker's throat and the udder, and the same variety from throats of the numerous epidemic cases.

PERRY GOLDSMITH.

Radiotherapy in Hypertrophy of the Tonsils. PORTMANN. (*Rev. de Laryngol.*, 31st December 1921.)

Dr Portmann having been struck by the conflicting reports on this subject subjected a series of cases with hypertrophied tonsils to X-ray treatment. There are two clinical types: (1) those in which the tonsils are large, soft, and friable and consist almost entirely of lymphoid tissue, (2) those in which the tonsils are hard and fibrous. The first type responds very favourably to radiation but in the second type there is no appreciable change. In the author's cases four treatments were given, the first two on successive days, the two others one or two months later. In those cases which were favourably influenced the tonsils began to shrink after two or three weeks and were completely atrophied in three months. With the doses which he employed there was complete epilation of the skin on the side of the neck.

J. K. MILNE DICKIE.

The Removal of Tonsils, with Special Reference to Methods other than Complete Enucleation. BURT RUSSELL SHURLY. (*Journ. Amer. Med. Assoc.*, Vol. lxxxi., No. 10, 8th September 1923.)

The furore for tonsillectomy, the craze to remove tonsil remnants, the poor work in the removal of adenoids by those unprepared, and the constant re-operation without a more careful physical survey, have in a large measure discouraged the public. It is not fair, the author points out, to take advantage of the patient's fear of anæsthesia, of

operative procedures and of the hospital or nursing home, and so draw him to the roentgen ray specialist, unless a statistical demonstration beyond experiment can justify the method. It is unscientific and unpardonable to state that X-ray treatment can replace tonsillectomy. X-ray and probably radium have a place in the therapeutics of the pharyngeal lymphatic ring, but they should be limited very definitely to selected cases which present some contra-indication to complete surgical removal. PERRY GOLDSMITH.

Death following Injection of Diphtheria Antitoxin. DONALD M'INTYRE and D. W. M'KAY. (*Lancet*, xi., 1133, 1923.)

The authors report this case. The patient was a boy, aged 10. The attack was severe and the dose of antitoxin given was 18,000 units intravenously, and 10,000 units intramuscularly. The usual reaction occurred, and recovery followed, but later coma and cyanosis appeared, the temperature rising to 108.2°. Patient died next day in a convulsion. The autopsy showed that death was due to status lymphaticus. MACLEOD YEARSLEY.

The Bacteriological Diagnosis of Diphtheria and the Carrier Problem. G. H. BURNELL and D. L. BARLOW. (*The Medical Journal of Australia*, 1st December 1923.)

The typical Klebs-Loefler bacillus in abundant culture is almost unmistakable, but the most important cases are often those in which somewhat atypical bacilli are found. It is important to determine if the more or less atypical strains are pathogenic. Much evidence can be gained from close observation with the microscope in correlation with the clinical side. Both writers make a practice of re-examining all cultures after two days' incubation. A table of 1707 cases given shows that approximately 30 per cent. of the positive results were only obtained on the second day. The serum medium of Greenston was used with most satisfactory results. In this, the medium is made distinctly acid with citric acid. Staining with Loefler's methylene blue does not give nearly as good a result as toluidin blue, the formula for which is—Toluidin blue, 0.8 gramme, acetic acid (pure), 10 c.c., absolute alcohol, 20 c.c., distilled water to one litre. With this, excellent bi-polar staining is obtained. A. J. BRADY.

Syndrome of the Posterior Lacerated Foramen associated with a Diphtheritic Neuritis. CIRO GALDERA. (*Archiv Italiani di Larinologia*, December 1923.)

A man of fifty suffered from what appeared to be a diphtheritic tonsillitis which cleared up after about eight or ten days without treatment. He remained well for a fortnight, but, at the end of

that time, he noticed a weakness and irregularity of the voice, some difficulty in swallowing, and a paresis of the soft palate. This disability increased until, when seen by the author, he presented a paralysis of the right half of the tongue, of the soft palate, and of the right vocal cord which was stationary in the cadaveric position. There was also a paresis of the constrictors of the pharynx, and of the sterno-mastoid and trapezius muscles. The paresis increased until both sides of the tongue and pharynx were involved, and there was some limitation of movement of the left vocal cord and left shoulder. The patient was treated with injections of strychnine and camphorated oil, with absolute rest and a diet of broth, milk, eggs, coffee, and a little marsala wine. After three weeks of this treatment he began to improve, but was not completely recovered until about two months.

The writer points out that a lesion affecting the 9th, 10th, 11th, and 12th cranial nerves of one side would naturally be put down to some mechanical or pathological condition in the region of the foramen lacerum posticum, but may be due, as in this case, to a post-diphtheritic neuritis. F. C. ORMEROD.

REVIEWS OF BOOKS

Hygiene of the Voice. IRVING WILSON VOORHEES, M.S. (Princeton), M.D. (Columbia). Published by The Macmillan Company, 1923. 212 pages.

This excellent little book is well worth the attention of laryngologists who may be called upon to advise and treat public speakers and singers. It is the result of the author's no small experience of this class of work. There is much in the book which recalls Morell Mackenzie's *Hygiene of Vocal Organs*, to which the author warmly acknowledges his indebtedness, but much of it is original and of practical utility.

The book is divided into two parts. The first is intended for the general reader, pupil, or teacher, not medically trained, and in which technical terms have been avoided as much as possible. The second part is intended as an introduction to physicians who desire more special information on the subject than can be had in the ordinary course of their professional duties, while theoretical matters, such as the "tonsil question" are fully discussed. Thus, in one chapter, the author gives the result of a questionnaire sent out to 500 physicians and singing teachers as to whether evil effects have followed the removal of the tonsils. This may be summed up in an analysis of 5000 tonsil operations in singers which shows there need be no fear of bad results.