

Ear

meninges from the blood stream. The localising symptoms in the brain did not appear until five days after the operation, and nine days after the onset of the ear symptoms.

Case of Unilateral "Nerve Deafness" in Disseminated Sclerosis, with Immobility of Opposite Vocal Cord—Sir JAMES DUNDAS-GRANT, K.B.E., M.D.—G. W., aged 47, a subject of disseminated sclerosis, complains of deafness in the right ear which developed in 1916, and was preceded by "bilious attacks" with giddiness in 1915. Post-rotational nystagmus on both sides on 3rd February, well-marked, but the past-pointing defective. Galton whistle heard on the affected side at the mark 2.8 only, but on the normal side at 1 to 6. Bone conduction on the affected side very much diminished. Amongst other features are to be noted diplopia on looking down and complete immobility of the left vocal cord.

In a case resembling this (Hess, Dissertation, 1888, *Schwartz's Handbuch der Ohrenheilkunde*, p. 507), there was found to be complete destruction of the left median acoustic nucleus by a focus of sclerosis, while the same nucleus on the right side contained a considerable number of diseased ganglion cells. The left auditory nerve was sclerotic in a considerable part of its extent; the deafness in this case was on the left side. Moos is of the opinion that disturbance of hearing in disseminated sclerosis depends most probably upon a sclerotic degeneration of the auditory nucleus and nerve stem.

Postscript.—On 17th February 1922, patient was submitted to re-examination with the cold air test with the following results: on the *right* side, there was practically no nystagmus, giddiness, or past-pointing; on the *left*, cold air after forty-six seconds produced active nystagmus to the right, past-pointing (specially marked with left hand) to left, and falling to the left. The palate is symmetrically paretic. Left vocal cord still completely paralysed.

ABSTRACTS

EAR.

Epithelioma of the Ear. A. C. BRODERS. (*Surgical Clinics of North America*, Oct. 1921, p. 1401.)

In this study of 63 cases the epitheliomata are graded in four degrees of malignancy according to the tendency of the epithelial cells to differentiate. Seventy-six per cent. of the patients were males, 24 per cent. females, and 64 per cent. of the males were farmers.

Abstracts

As regards site, 84 per cent. of the growths were on the auricle, 14 per cent. in the external auditory canal, and 2 per cent. in the middle ear. Fifty-six cases were operable and were treated surgically with or without radium application. Sixty-two per cent. were squamous-celled, 33 per cent. basal-celled, and 5 per cent. of melanotic types. Lymphatic glands were involved in 86 per cent. Results are classified according to the type, site, and size of growth and presence of metastases. Forty-seven per cent. of the patients are alive and well.

DOUGLAS GUTHRIE.

Total Replacement of the Auricle. J. F. S. ESSER. (*Munch. Med. Wochenschrift*, Nr. 36, Jahr. 68.)

In the first instance a rough model of the auricle to be replaced is fashioned from the patient's rib cartilage. This is inserted beneath the post-meatal skin. When from one to two months have elapsed and complete healing has ensued, the original skin incision is reopened, but to a larger extent, and the soft parts including the periosteum elevated well forwards to the external meatus.

A cast of the wound cavity 2 to 3 mm. thick is now made by means of Stent's dental wax, the superfluous wax being cut away at the wound margin. When hard, the wax is removed and covered with a large Thiersch graft. The wax model so covered is now inserted into the wound and the edges sutured.

The stitches are removed in from eight to fourteen days and the Stent's model removed. It will be invariably found that the graft has healed in very accurate position and that the new auricle has now got an ample skin surface on both sides.

Minor plastic operations to form a lobule, etc., may be subsequently carried out without difficulty.

JAMES B. HORGAN.

An Unusual Case of Injury to the Petrous Bone. LAWSON WHALE. (*Lancet*, ii., 1921, p. 1002.)

The author gives the interesting history of an officer wounded at Loos in 1915 by a piece of shrapnel which passed through the right cheek (destroying the right eye), nasal cavities, and both maxillary antra, and lodged in the left petrous bone, where it caused no local symptoms until 1919, when the patient contracted influenza and resultant left otitis media with acute mastoiditis. Operation was necessarily extensive, the shrapnel being found in the concavity of the superior semi-circular canal. Recovery was slow but uncomplicated.

MACLEOD YEARSLEY.

Ear

The Efficacy of Autogenous Vaccine Therapy in a Case of Septic Sinus Thrombosis. P. CALICETI. (*Arch. Ital. di Otol.*, Vol. xxxii., No. 5, 1921.)

A male, aged 17, was admitted to the clinic on 4th February 1921, with acute middle-ear suppuration and mastoiditis. Operation 6th February 1921. Diffuse osteitis, sigmoid sinus exposed and covered with granulations. As it was soft and pulsating it was not opened. Pus showed diplococci of Fränkel. After operation the condition became noticeably worse; severe headache, tenderness under tip of mastoid; temperature rose to 40.9 with a slight rigor; no signs of inner ear or cerebellar disturbance. On the 8th, headache became acute and pain under mastoid spread down the course of the jugular vein; temperature rose to 40.2. On 9th February 1921, second operation: sinus widely exposed down to jugular bulb. It was yellowish grey in colour and did not pulsate. It was opened and found full of firm clot. Antero-external wall of sinus removed, attempts made to pull out clot; free bleeding from upper end, but none from lower end; jugular vein exposed in neck; found thrombosed; ligatured below thrombus but apparently not opened; dura of middle and posterior fossæ explored with negative result. For several days afterwards the condition was serious with high temperature. A vaccine was prepared from the pus. 13th February 1921, 10 millions given. Three days later temperature dropped somewhat to 36.4. On the same day a second injection of 10 millions was given. On the next day temperature remained below 39, but there was a slight rigor. On the 18th, rigor and temperature rose to 40.1. On 19th given 18 millions; patient complained of pain in right hip joint, which lasted several days. Temperature remained irregular for several days, and increasing doses of vaccine were given till they reached 250 millions on 4th March 1921. The general condition was now much improved.

After seventeen days without fever he had a rigor and temperature rose to 40.2, and after a profuse sweat dropped to 39. Next day (26th) complained of pain in right side of chest, and an area with harsh breath sounds was discovered. In the evening he had another rigor and temperature rose to 40.1. On 27th 100 millions of vaccine given, and three days later 200 millions. Temperature remained elevated for a few days, and then finally dropped. Patient discharged cured 8th April 1921.

Caliceti commenting upon the case points out the undoubted value of the vaccine. The septic character of the temperature continued in spite of the operation, and only dropped after the administration of the vaccines. Secondary septic foci had apparently started in the hip and lung, but had cleared up without any other treatment.

J. K. MILNE DICKIE.

Abstracts

Recent Work on the Labyrinthine Functions. C. R. GRIFFITH, Ph.D.
(*Journal of Ophthalmology, Otology, and Laryngology*, March 1922.)

The author, who is Professor of Psychology in the University of Illinois, states that the crude conception of nystagmus as a constant response to a vestibular stimulus is no longer regarded as sound. Nystagmus is something more than a simple reflex.

During the past two years he has rotated forty individuals at definite intervals in a chair fitted with various mechanical refinements, including an ultra-rapid moving picture camera and Dodge's apparatus, in which two small mirrors, resting upon the closed eyelids, reflect a beam of light in such a way as to magnify the ocular excursions, which occur more freely in the absence of visual fixation. Further, by attaching recording apparatus to the limbs, he has found that the whole body is just as definitely stimulated.

Griffith has also experimented with white rats, which lack the human faculty of fixation, but have a similar equilibratory mechanism. By means of special cages three successive generations have been bred in a constantly rotating environment. If the number of revolutions to the minute be changed frequently nystagmus tends to disappear; otherwise its duration is unaltered. Moreover, thus analysed, vestibular nystagmus is an undulatory movement rather than a rhythmic alternation of quick and slow components, and experiments with drugs having a selective action on the higher centres suggest that the cerebrum is not concerned. Griffith does not give details of these experiments. He regards nystagmus as a cerebellar and bodily adjustment running back in genetic history to the lateral line canals of the fish.

When the white rats are removed from the rotating cages they walk in the opposite direction to the previous rotation for three or four weeks, stopping only to eat or sleep, and unless returned to the cages die after a few months. When mated with normal rats the litters perish unless placed with a female in a revolving nest.

Griffith believes that the amount of turning a boy gets in his swing may permanently influence his labyrinthine functions. In a case of recurrent vertigo Griffith has commenced, in his laboratory, a course of treatment by cumulative rotations, hoping to establish a tolerance.

WM. OLIVER LODGE.

The Psychological Absence of the Pointing Reaction. BRUNO
GRIESMANN. (*Münch. Med. Wochenschrift*, Nr. 7, Jahr. 69.)

The detailed description of a case, the first in the literature, in which a failure of the vestibular pointing and falling reactions could, with certainty, be ascribed to hysteria. This case clears up the pre-existing doubts about the possibility of such an occurrence.

Ear

The psychological failure of the pointing reaction after rotation may be compared to the absence of reflex excitability in the functional anæsthesia which is met with in cases of hysteria.

JAMES B. HORGAN.

An Acoustic Method for Training the Deaf. Dr M. A. GOLDSTEIN.
(*Laryngoscope*, Vol. xxxi., No. 7, p. 444.)

The author gives a historical survey of what has been done in this field and a classification of the various types and degrees of deafness. As regards prognosis each case must be considered as regards etiology, general physical and mental development.

The acoustic method of education requires great patience and persistence. In the case of a totally deaf child, the first step is to educate that child to hear a sound. This is done by means of the harmonium (Passive Education) which is specially made for the purpose. Gradually the notes of the harmonium are appreciated, and when perception of tones is sufficiently developed in range for the human voice, Active Education is commenced. The purpose of this is to educate the patient to hear at first simple vowel sounds. As soon as this is done the pitch is altered so that the same sound is heard at various pitches. Other vowels are taught, then consonants mixed with vowels follow. So far no word image has been produced by the method. This is now introduced by teaching a series of one-syllable words and educating the mind what the words imply. The association of ideas is as important here as in lip-reading.

Some of the results published are encouraging and the author hopes more interest will be taken by otologists in this question of educating the deaf. Much may be done for even the totally deaf. Obviously very intelligent teachers, with unlimited patience and perseverance, are necessary.

ANDREW CAMPBELL.

The Effect of Methodic Acoustic Exercises on the Hearing Organ of Deaf-mutes. Prof. URBANTSCHITSCH. (*Laryngoscope*, Vol. xxxi., No. 7, 477.)

In 1894, the author showed a number of pupils who had been trained by acoustic exercises with excellent results. A surprisingly high percentage of considerable residual hearing is present in deaf-mutes. The method adopted is similar to that of Dr Goldstein in St Louis.

The perception of hearing in deaf-mutes is subject to much fluctuation, but such is transitory, and good results are eventually possible. Acoustic fatigue may occur in the early periods of practice. Continued and concentrated attention is very tiring to the deaf pupil, and exercises should be given in small doses and repeated frequently.

Abstracts

The pupil is at first only a little interested, but soon the desire to hear develops. Even the hearing of vowels is of great value, as this modifies the unpleasant, unmodulated voice of the deaf-mute.

ANDREW CAMPBELL.

Anomalies in Patients who suffered from Epidemic Cerebro-spinal Meningitis. A. DE KLEYN and C. VERSTEEGH. (*Acta Otolaryngologica*, Vol. iii., fasc. 3.)

Deafness remaining after cerebro-spinal meningitis may be divided into two main types: (a) slight inner-ear deafness characterised by diminution of hearing in the middle octaves, with complete or nearly complete integrity of the upper and lower regions and normal vestibular reactions. This type must probably be regarded as the result of a neuritis acustica; (b) various forms of inner-ear deafness of greater or less degree up to absolute deafness, combined with vestibular disturbances. Cases described in the literature belong usually to this type. Stenver's method of X-ray examination is of great use for detecting lesions of the inner ear. Many cases showed spontaneous nystagmus, the cause of which is probably a lesion of Deiter's nucleus.

Cases suffering from deafness of type (a) did not show vestibular disturbances, but on account of the inaccuracy of the methods of vestibular investigation as compared with the acoustic methods, it can never be safely concluded that the static sense in these cases is really normal.

Disturbances of equilibrium, such as are noted in type (b), may be due to lesions of either the vestibular apparatus or of the cerebellum or of both.

THOMAS GUTHRIE.

NOSE AND ACCESSORY SINUSES.

Rheumatoid Arthritis due to Infection of the Nasal Accessory Sinuses.

P. WATSON-WILLIAMS. (*Brit. Med. Jour.*, 21st January 1922.)

The writer pleads that the recognition given to the teeth, the gastro-intestinal tract and the genito-urinary apparatus as possible sources of the auto-intoxication manifested in the rheumatic diathesis should be extended also to the nasal accessory sinuses.

He cites several cases in which the relationship was fully proved by complete disappearance of the symptoms on evacuating the pus from the affected cavity. He makes the observation that it is often found that the systemic effects—rheumatic and otherwise—are apparently more pronounced in cases where there is no profuse discharge of pus from the nose, just as it is often noticed that in children the systemic disturbance is not in due proportion to the size or apparent septicity

Nose and Accessory Sinuses

of the tonsils and adenoids. His explanation of this is that where an infection gives rise to a profuse outpouring of polymorphonuclear cells with phagocytosis, the invading organisms are so largely inhibited or ingested that the patient is protected from septic absorption, whereas with few pus cells, toxic absorption is more pronounced. He compares in this respect the two forms of post-mortem wound—one with an acute local reaction, the other with almost no local signs, but a rapidly onsetting septicaemia.

T. RITCHIE RODGER.

Nasal Diphtheria after Enucleation of the Tonsils. B. SEYMOUR JONES, F.R.C.S. (*Brit. Med. Jour.*, 25th March 1922.)

The writer has seen five cases of nasal diphtheria in the past year, in all of which the tonsils had been previously enucleated. His suggestion is that, with the tonsils absent, the child is still liable to infection in the nose, and this site not being so obvious may readily escape notice, so that in his cases symptoms had been present for periods ranging from one month to three. He further thinks "there is ground for the presumption that nasal diphtheria may be a considerable factor in the causation of atrophic rhinitis, owing to its occurrence in children when the nose is growing, the turbinal bones in process of development, the arteries thin-walled, and the mucous glands immature. The diphtheritic toxins may act on the olfactory, sensory, and vasomotor nerves of the mucous membrane, paralysing them, and consecutively inducing trophic changes by inhibiting the central impulses which govern growth."

T. RITCHIE RODGER.

Caseous Empyema of the Maxillary Sinus. DR PAUL CAZEJUST. (*L'Oto-Rhino-Laryngologie Internationale*, September 1921.)

The author defines the condition as an affection of the maxillary sinus characterised by the accumulation in the sinus of a caseous material resembling the interior of certain sebaceous cysts, implicating or not the neighbouring structures, and with or without general or local symptoms. Only 33 cases have been published.

In the literature of the subject, two theories hold the field. On one side, Avellis and Luc think that this is not a separate disease but is merely a spontaneous cure of an acute sinusitis, resulting in the inspissation of the pus collected in the antrum, with a subsequent process of caseation taking place. These authorities state that cure of the condition has been known to take place after two lavages of the antrum. Texier, on the other hand, holds that this is a separate entity which may be of a mild type or may take the form of a very acute sinusitis, with much congestion of the affected side of the nose, and resembling malignant disease of the antrum or tertiary syphilis.

The writer's case was a man who complained of symptoms pointing

Abstracts

to a very severe acute maxillary sinusitis. Lavage of the antrum affected was negative. The antrum was explored, and a mass of very foul-smelling cheesy material was removed from the cavity. After further lavage, the condition cleared up satisfactorily. The writer draws attention to the fact that this collection gathered in the eighteen days between the patient's first two visits.

In view of the obscurity of this type of sinusitis, Cazejust asks for research into the nature of the cheesy material found in these cases.

GAVIN YOUNG.

LARYNX AND PERORAL ENDOSCOPY.

The Danger of Steel Scrubbers. ANDREW WYLIE. (*Lancet*, 1922, Vol. i., p. 626.)

The author describes four cases in which small pieces of wire, broken from steel brushes or steel scrubbers used by cooks to clean kitchen utensils, cause considerable trouble by lodging in the throat or larynx.

MACLEOD YEARSLEY.

Hæmangioma of Larynx. J. B. CAVENAGH. (*Lancet*, 1922, Vol. i., p. 635.)

The author describes the case of a man, aged 32, who complained of persistent hoarseness and cough. He was sent to a sanatorium as tuberculous. It was not until nearly five years later that a laryngoscope was used and revealed a pedunculated growth the size of a small bean over the anterior commissure.

MACLEOD YEARSLEY.

Bronchoscopic Studies of Pulmonary Abscess. HENRY T. LYNNAH, M.D., New York. (*Journ. Amer. Med. Assoc.*, Vol. lxxvii., No. 20, 12th November 1921.)

This paper deals with the treatment of lung abscess by suction through a bronchoscopic tube. The X-rays if used and interpreted by an expert makes the localisation of the infected lung comparatively easy. The dense zone around the abscess is described as a zone of pus sponge-soaked lung structure. After suction the outlines of the abscess cavity are much more clearly seen and most of the sponge-soaked area disappeared. Bismuth in pure olive oil was used as an injection into the cavity to better define its limitations.

Lynnah believes that most of the cases of pulmonary abscess in which persons survive are due to aspiration, and he feels that they should be treated as aspiration or foreign body pneumonia, and he gives a thorough bronchoscopical trial first before radical major surgical intervention is attempted. The only real contra-indication is severe pulmonary hæmorrhage; the temperature is of no account. Illustrative cases are cited.

PERRY GOLDSMITH.

Reviews of Books

MISCELLANEOUS.

Acute Infection of the Thyroid Gland. CHARLES REID EDWARDS, M.D.
(*Journ. Amer. Med. Assoc.*, Vol. lxxvi., No. 10, 5th March 1921.)

This report deals with four cases of thyroiditis, that is, infection of the normal gland. The onset of the symptoms in these cases is usually sudden, accompanied by pain in the neck, frequently referred to the ear, teeth, shoulder, arm, or chest, depending on the amount of pressure produced. The temperature is elevated, pulse rapid, persistent cough with a pronounced change in the voice, dyspnoea, painful swallowing and extreme restlessness. The leucocyte count is usually increased unless there has been a profound infection of long duration. Physical examination revealed localised or diffused swelling in the anterior and lower part of the neck, with redness and marked induration, which sometimes makes it difficult to differentiate from woody phlegmon.

In the four cases cited suppuration was found in the gland in all. The recovery was uneventful, and the subsequent history of the cases showed no symptoms referable to an alteration in the thyroid secretions.

PERRY GOLDSMITH.

REVIEWS OF BOOKS

Traité de Pathologie Médicale et de Thérapeutique Appliquée: XXVI.
Ophthalmologie et Otologie dans la Pratique Médicale. SIEUR,
POULARD, BAILLAIRT, and BOURGEOIS.

This is a well printed volume of 536 pages, in paper covers, with 134 illustrations. The inclusion of ophthalmology and otology in the same volume permits Sieur to write an excellent introductory chapter on the susceptibility of the eye and ear to systemic affections, in which various points of similarity are well brought out. For example, the ophthalmic and auditory nerves are affected by the same diseases, yet differences in the course of the respective affections are of much importance, as in estimating the prognosis of impaired function from loss of blood or toxic poisoning. A combined manual has also the advantage to the practitioner that many symptoms such as headache, vertigo or nystagmus may be ocular as well as aural in origin, just as paralysis of the external rectus associated with trifacial neuralgia (Gradenigo's syndrome) may be due to otitis media.

The ophthalmological section by Poulard and Baillairt well fulfils