ABSTRACTS

THE EAR.

Tympanic Retraction is not always an Index of Tubal Stenosis and Defective Hearing. P. CALICETI. (*Arch. Ital. di Otol.*, Vol. xxxv., October 1924.)

The author states that a retracted tympanic membrane with good hearing has not often been observed. He has collected and examined nine cases. Seven of these had previously had adenoids with defective hearing, but after removal of the adenoids had recovered normal hearing. In two others there was no history of any previous deafness. In those who had had previous ear trouble the membranes were not as freely movable as in the other two. He attributes the retraction in the first group to contracture of the tensor tympani with partial dislocation of the malleus at the malleo-incudal joint. In the second group the appearance is attributed to an anatomical anomaly in the angle between the handle and head of the malleus. This angle is subject to great variations. The author examined a large number of mallei and found that there were differences of 39.9 degrees in various specimens.

J. K. MILNE DICKIE.

Therapeutic Trials of the Röntgen Ray Treatment of Otosclerosis. H. FREY and A. KRISER (Vienna). (*Zeitschrift für Hals-, Nasen-, und Ohrenheilkunde*, Bd. vi., Heft 2, p. 334, 1924.)

This was applied in two directions:—

(1) In feeble strength over the region of the thyroid gland to regulate the internal secretion of the parathyroids.

(2) In a stronger form over the temporal bone to restrict the development of the young osseous tissue and indirectly to act on the pituitary body.

They found that there was in none of their cases any further increase in dullness of hearing, and that in the majority there was a slight improvement. The subjects felt better and found their tinnitus less troublesome. In one instance the redness of the promontory was much diminished. In the subsequent discussion Thielemann (Berlin) reported a case in which the use of X-rays for tuberculosis of the root of the malar bone was followed by the development of a high degree of nerve-deafness. Kriser replied that tuberculous tissue and the skin of tuberculous subjects were abnormally radio-sensitive, so that only very small doses at long intervals were permissible.

JAMES DUNDAS-GRANT.

The Ear

Relation of the Canalis Endolymphaticus. H. P. CHATELIER. (*Comptes Rendus, Tenth International Congress of Otology*, 1923.)

There is considerable difference of opinion amongst anatomists as to the relation of the various parts composing the membranous labyrinth. According to the usual text-book descriptions the sole communication between the saccule and utricle is *via* the two limbs of the Y-shaped canalis endolymphaticus. Georges Portmann, in a paper read at the Twenty-seventh Annual Congress at Brussels, 1921, states that the saccule and saccus endolymphaticus form terminal dilatations of a single unbranched canalis endolymphaticus, and that the communication with the utricle is in the form of a small lateral opening from the utricle to the point at which the canalis is widening out to merge into the saccule. Chatelier, as the result of a reconstruction from serial sections of the labyrinth of a human fœtus 52 mm. in length, asserts that—

(1) The interutriculo-saccular communication is not through a Y-shaped canal, but direct through a small orifice in the inferio-internal portion of the interutrico-saccular septum.

(2) The sacculus endolymphaticus connects, not with the saccule, but direct with the utricle, through a nearly straight and not bifurcated canalis endolymphaticus, which enters the utricle close to the interutriculo-saccular orifice. G. WILKINSON.

A New Clinically Useful Nystagmometer. GUSTAV WOTZILKA, Aussig. (*Zeitschrift für Hals-, Nasen-, und Ohrenheilk*, Bd. viii., Heft 1, May 1924, p. 93.)

A small pad with three soft knobs lies on the closed eyelids. It is attached to a lever which plays on a Marey's tambour communicating by means of a flexible tube with a Kymographion. The instrument is made by Reiner of Vienna. The description is illustrated with curves from labyrinthine nystagmus and congenital (undulating) nystagmus.

JAMES DUNDAS-GRANT.

Clinical Studies of Vestibular and Auditory Tests in Intracranial Surgery. Dr W. P. EAGLETON. (*Laryngoscope*, Vol. xxxiii., No. 7, p. 483, 1924.)

The article is written chiefly with reference to the importance of:—

(1) The absence of reactibility of the vertical canals of both ears to stimulation by the cold caloric test, in the diagnosis of increased intracranial pressure of the posterior fossa.

(2) The reduction of the duration of the nystagmus from turning in diffuse lesions of the cerebro-spinal system pathways over the cerebellar cortex, with a description of a new vestibular symptom complex.

Abstracts

The author is of opinion that accurate localisation of intracranial lesions can be best advanced by means of a clinical classification, and he deplores the disastrous results of hypothetical teaching not based on clinical or experimental evidence. The abnormal vestibular reactions should be tested as they are clinically present in different diseases and lesions, and by the evidence of large numbers of carefully studied cases, real progress will be made. The classification is as follows: (*a*) Non-surgical diseases, with no increase of intracranial pressure; (*b*) surgical lesions, with increased intracranial pressure, subdivided into various localising groups.

Suppurative lesions lend themselves to analysis with greater facility than surgical non-suppurative diseases, whose manifestations are lost owing to their chronicity and the consequent vestibular compensation.

In cases of increased intracranial pressure there is an absence of the reaction of the vertical canals to cold caloric on the side opposite the lesion, but, if the lesion is above the tentorium, the reaction is generally obtained though reduced and delayed. This sign is of general diagnostic value comparable with optic neuritis, and the presence of increased intracranial pressure obscures or prevents further localisation by the vestibular tests alone.

A protective collection of abnormal cerebro-spinal fluid situated over the anterior surface of the cerebellum, combined with partial obliteration of the cerebro-spinal fluid circulatory system from labyrinthine involvement, either suppurative or traumatic, has a definite vestibular symptom complex, viz.: (*a*) Loss of reaction of the vertical canals of both sides, from increased intracranial pressure; (*b*) early reduction of nystagmus of the opposite side by turning, the reduction amounting to about 50 per cent.

These vestibular manifestations appear early and continue for a considerable period. The spontaneous pastpointing due to intracranial involvement rapidly disappears, but the presence of earlier spontaneous pastpointing which has disappeared may be demonstrated by the failure to induce pastpointing in the opposite direction. In other words, if pastpointing to the right existed at one time and later disappeared, the patient cannot be induced to pastpoint to the left. Spontaneous pastpointing due to pressure from tumours, etc., may entirely disappear and leave no trace of its presence at any previous time.

ANDREW CAMPBELL.

Animal Experiments and Clinical Investigations on the Relation of Blood Pressure to the Static Apparatus. Dr CONRAD STEIN and Dr OSKAR BÉNESI. (*Monatschr. f. Ohrenh.*, 1924, Nos. 7, 8, 10, and 11, pp. 100.)

In order to ascertain the effect of variation in the blood pressure on the function of the static apparatus (which they state has not been

previously established) the authors undertook a series of experiments on animals, and later, with the knowledge thus gained, conducted a series of clinical experiments.

The normal reactions of the animal having been previously noted, the effect was then determined of the influence of raised blood pressure on the rotation reactions, after the intravenous injection of an adrenalin preparation into one of the auricular veins; while other experiments were also conducted on the effect of compression of the cervical vessels, on the influence of inhalations of amyl nitrite, and on the influence of venesection.

The results thus obtained, the authors summarise as follows:—

(1) Compression of the neck and inhalation of amyl nitrite caused no effect whatever (in any of the animals tested) on the character and condition of the nystagmus induced by rotation.

(2) A marked lowering of blood pressure by venesection caused increase of the nystagmic movements, together with a decrease in their intensity.

(3) The raised blood pressure induced by the intravenous injection of a supra-renal preparation, caused an alteration of the character of the vestibular excitability, as shown especially by the decrease in the frequency and increase in the intensity of the nystagmic movements.

Based on the knowledge of this experimental work, clinical investigations were then carried out on sixty-eight patients, who were grouped in three divisions as follows:—

The first group included patients with a continuous hypertonic condition; the second group consisted of patients with a high blood pressure, who were examined both before and after the effect of drugs, which reduced that pressure; while the third group comprised cases of varying blood pressure.

The results of these examinations are set forth in a series of very comprehensive tables, showing the general history and symptoms of the patients—their special "aural" condition—and the effects of the various "vestibular" tests for the semicircular canals, with a subsequent detailed analysis of, and commentary on, the different points noted.

As a general proposition, apparently about half the patients so examined were found to have some irregular or abnormal response. As one would expect, however, this could not be referred to the one item of blood-pressure alone, but to a combination of this with other concurrent disabilities, such as middle- and inner-ear affections, arterio-sclerosis, nephritis, cardiac lesions, and other general chronic maladies, while temperament and age also had some influence on the results.

The article forms a valuable record of the systematic examination

of cases from this point of view, and emphasises the importance of a "general" examination of these cases in addition to the special tests for the auditory and vestibular nerves.

One only regrets that the effects of "position" apparently were not noted at the same time. ALEXANDER TWEEDIE.

Acute Lymphatic Leukæmia simulating Otogenic Meningitis. Dr WEISS. (*Zeitschrift für Laryngologie und Rhinologie*, July 1924.)

The case described is that of a boy aged 11. The disease, which was an acute infectious illness associated with high temperature and attacks of epistaxis, was diagnosed as influenza. He began to complain of pain in the right ear, and discharge was noted. This was followed, in six days' time, by a spastic paralysis of the left leg and arm. The patient was sent to hospital as a case of otogenic meningitis. The diagnosis was not at once accepted, as there were no other signs of meningitis, and the signs in the ear only suggested a mild inflammatory condition. An examination of the eye fundus revealed hæmorrhagic effusions in the retinæ on both sides. The most striking clinical feature was the extreme pallor of the child. When, on the following day, the mastoid process became tender, operation seemed justified. The dura mater was explored with needles in various directions, and on aspiration about 5 c.c. of a blood-stained serous fluid were withdrawn, but no sign of pus found. During the operation, Dr Weiss noticed the extraordinarily pale colour of the blood, and this observation for the first time suggested a blood examination. The blood picture showed an acute lymphatic leukæmia, a rare disease, the etiology of which up to the present is not known. It is invariably fatal, and runs its course in six to eight weeks. The hæmorrhages, which may occur in any situation, in this instance affected the nasal mucosa, the retinæ and the meninges. The effusion into the brain coverings led to localised destruction of cortical areas and produced the paralysis, which so confused the diagnosis in this case. J. KEEN.

THE NOSE.

Case of Complete Congenital Choanal Atresia. D. GALAND, Brussels. (*Bulletin d'Oto-Rhino-Laryngologie*, Paris, September 1924.)

Dr Galand was called to see a child weighing 5 pounds and showing signs of severe asphyxia. Delivery had been effected, after a normal labour, a few hours previously; the child had not then been cyanosed, and had cried. When the mouth was propped open, the respiratory trouble disappeared. He thought of adenoids; a curette was used without effect, but it was remarked that no blood escaped from the nose. A probe passed into either nostril revealed the cause;

a firm bony diaphragm without any orifice closed each choana. This was broken down with an antral trocar on both sides. The child was at once entirely relieved of respiratory difficulty, but died three months later of enteritis. E. WATSON-WILLIAMS.

On Perforation of the Cartilaginous Septum in Cocain-snuffers. NATANSON and LIPSKEROFF, Moscow. (*Zeitschrift für Hals-, Nasen-, und Ohrenheilk*, Bd. vii., Heft 4, April 1924, p. 407.)

Out of 74 cases (most of which were *puellæ publicæ*) under their observation the writers found 40 with no syphilitic history, 28 with a syphilitic history but no existing signs, 5 in the primary or the condylomatous stage, 1 with tertiary lesions. The perforation was generally unknown to the patient, and it was present in some cases in which cocain-snuffing had been practised for only a few weeks or months. The quantity of cocain varied from 1 to 10 grams or more, often daily. Removal of a small portion of the margin showed under the microscope fibrillation of the cartilage, degenerative changes near the margin and replacement by fibrous tissue, slight lymphoid infiltration in the sub-mucosa, marked anæmia.

If the ulceration which precedes the perforation is superficial and does not reach the cartilage, it may heal if the habit is given up.

In cases of simple perforation the possibility of cocain habit should be considered. JAMES DUNDAS-GRANT.

The Treatment of Vaso-motor Rhinitis. K. MENZEL, Vienna. (*Zeitschrift für Hals-, Nasen-, und Ohrenheilkunde*, Vol. viii., Heft 2, February 1924, p. 150.)

For those cases in which the ordinary simpler methods of treatment fail, the writer recommends submucous injection of alcohol, 50 to 60 per cent., into the anterior, middle, and posterior parts of the inferior turbinal, also into the anterior end of the middle turbinal and that part of the septum which corresponds to the tuberculum. This may be preceded by the application of 20 per cent. cocain and the injection of a small quantity of novocain. Among the simpler methods he recommends the application of tampons moistened with Afenil for about fifteen to twenty minutes. He prescribes this as follows: Calc. chlorat. (*sic*), ureæ pur. āā 0, 5; water 10. He has found benefit follow the administration of thyroid and of ovarian tabloids. JAMES DUNDAS-GRANT.

THE PHARYNX.

The Styloid Process of the Temporal Bone: its Variations and their Surgical Significance. DOUGLAS GUTHRIE, M.D., F.R.C.S. (*Edinburgh Medical Journal*, July 1924.)

This paper is an interesting and clearly written summary of the aberrations of the styloid process. The writer divides its abnormalities

into two classes: (1) Undue length as the result of senile ossification of the stylo-hyoid ligament; (2) the presence of a more or less complete stylo-hyoid chain of bones such as one meets with in the lower animals. Instances are quoted from the literature of actual cases, and a concise account is given of the comparative anatomy of the skeleton of the second branchial arch (Reichert's cartilage) and its relation in the body and greater cornu of the hyoid bone with the keratal and basal elements of the third arch.

In dealing with the surgical side of the question the author points out how frequently there may exist considerable elongation without symptoms, and describes two cases in his own experience in which the styloid process lay exposed in the fossa after tonsillectomy. In the absence of special instruments the bone was not further removed, and in neither case were there any ill-effects afterwards. On the other hand cases are brought up to show how "the abnormality, probably by its inward inclination rather than by its mere length," can give rise to "symptoms of (1) irritation or pain in the tonsillar region, or (2) difficulty of swallowing." In La Motte's case, for instance, a man, aged 51, had suffered from cough and sore throat for eight years and had been treated by twenty-nine doctors without relief. The styloid process could be felt between the faucial pillars, and the removal of one inch of its extremity relieved all the symptoms. The paper concludes with an excellent bibliography. F. J. CLEMINSON.

Suggestions on the Ætiology of Hypertrophy of the Tonsils. H. L. CRONK. (*Lancet*, 1924, Vol. ii., p. 904.)

The author does not agree with the theory of the inflammatory origin of enlarged tonsils and adenoids, and considers that the "attitude of hostility towards the tonsil" is now lessening. He insists that the duty of the tonsil is not only to destroy organisms, but also to keep up the supply of lymphocytes in the blood and that it is in the latter function that the reason for hypertrophy lies. There is a definite communication between growth and tonsils, the two main maxima of increase of weight occur two to three years after a maximal incidence of tonsil hypertrophy. Cronk suggests that increase of lymphoid tissue is obviously a necessary preliminary to growth in weight, and that the tonsils in this matter hypertrophy simply in order to take their share in the production of lymphocytes, and not as a result of infection. MACLEOD YEARSLEY.

Subcutaneous Emphysema following Tonsillectomy. CHARLES ROSENBAUM, M.D., New York. (*Journ. Amer. Med. Assoc.*, 28th June 1924, Vol. lxxxii., No. 26.)

The author reports a case of emphysema of the eyelids, face, and neck on both sides which came on ten minutes after tonsils had been

removed by dissection and snare. He states that the patient had given no trouble in taking the anæsthetic and that suction was used. The swelling completely disappeared in three days and the healing took place in the usual time. The writer states that few cases of this kind have been reported and no explanation has yet been offered.

PERRY GOLDSMITH.

Surgical Emphysema following Tonsillectomy. Dr S. STEIN. (*Laryngoscope*, Vol. xxxiii., No. 10, p. 785.)

An alarming and unusual complication during or immediately after tonsillectomy is reported. The Sluder dull blade guillotine was used and there was practically no bleeding but the child gagged a little. The operator turned to pick up an adenotome and was shocked to see a face bloated, eyes closed by tremendous bulging eyelids, scalp lifted high, cheeks bellowed out and respiration seemed to have ceased. Palpation gave a parchment-like crackling, the tissues of the face, neck, scalp down to the chest anteriorly and posteriorly to the level of the sixth rib were infiltrated with air. The picture presented was as if a tube had been introduced into the superficial areolar tissue and air pumped in, and it seemed to have come on in the fraction of a second. Breathing had recommenced and the emphysema disappeared within a week. The author suggests that the ether and air mixture from the pump apparatus was probably forced through the tonsillar beds. ANDREW CAMPBELL.

REVIEW OF BOOK

Les Sourds-Muets; Étude médicale, pédagogique, et sociale. Le Dr G. DE PARREL et MME. GEORGES LAMARQUE. 1925. Paris: Les Presses Universitaires de France.

This book, the result of the work of the senior medical officer and one of the teachers at the National Institution at Paris, has a preface by the superintendent or director, as they say on the continent, of the Paris institution. The book is the most complete account of work for the deaf which has proceeded from any single institution. It is not generally appreciated that many questions, some of them of a purely medical nature, can only be settled within the institution or schools for the deaf, and the first part of the book—the clinical and pathological—is an attempt to settle one of them.

To what extent is hereditary syphilis the cause of congenital deafness? More than twelve years ago the present reviewer showed that in British institutions hereditary syphilis did cause congenital deafness. Dr de Parrel goes much further. Depending not so much on the