

ABSTRACTS.

THE EAR

The Mechanism of the Stimulation of the Otolith-Apparatus. S. KOM-
PANEJETZ, Jekaterinoslaw. (*Zeitschrift für Hals-, Nasen-, und
Ohrenheilkunde*, Band xix., Heft 3, p. 231.)

In two cases of inflammation of the saccule-apparatus in which the semicircular canal system appeared to be normal, the patient found relief from his vertigo only when lying on his face with the sound ear on the pillow, therefore, with the otolith of the affected sacculus pressing on the macula. The writer, therefore, concludes that the mechanism of stimulation is the traction of the dependent otolith on the macula and not pressure on it. The article contains tables showing the difference in the counter-rolling of the eyeballs according as the patient lay on the sound side or the diseased one. He mentions a modified form of instrument for measuring this rolling, but leaves its description for separate publication.

JAMES DUNDAS-GRANT.

The Flow of Endolymph in the Semicircular Canals. W. UNDRITZ.
(*Zeitschrift für Hals-, Nasen-, und Ohrenheilkunde*, Band xix.,
Heft 3, p. 275.)

With models of the natural size of the canals Undritz found that movement of the liquid could be effected both by rotational and caloric influences, thereby giving support to the purely physical theories so far as physical experimentation permits. He considers that experiments with large models are not convincing.

JAMES DUNDAS-GRANT.

Technique of the Neumann Labyrinth Operation. O. BECK and E.
SCHLANDER, Vienna. (*Zeitschrift für Hals-, Nasen-, und
Ohrenheilkunde*, Band xix., Heft 1, p. 59.)

The details of the operation are determined by the width or narrowness of Trautmann's triangle bounded above by the middle fossa of the skull, in front by the facial ridge, and behind by the sigmoid sinus, the position of the last determining the width of the triangle. The radical mastoid operation must include a deep clearance of the facial ridge both in its vertical and in its overhanging parts, and a chiselling down of the floor of the meatus to open the hypotympanum as much as possible. The next step is to open the posterior vertical canal and localise the two openings which are round in shape, while the opening afterwards made in the external canal is oval,

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lying in front of and higher than the others and close in to the facial ridge. A bent probe introduced into the latter opening enters the vestibule, which is thrown into one with the posterior canal. When the Trautmann triangle is very narrow it is advisable to open the horizontal canal first, and in the narrowest forms the superior edge of the petrous bone has to be chiselled away after detaching the dura mater and superior petrosal sinus. In ordinarily favourable cases it is unnecessary to expose the dura mater, a point not always made clear in the descriptions of Neumann's operation. If meningitis or cerebellar abscess is present a more extensive form of operation is required, reaching the internal auditory meatus which the ordinary operation does not do. The bone is chiselled away so that the dura mater of both the middle and the posterior fossæ is laid bare. The detachment of the dura mater from the bone is usually accompanied by a tear at a spot lying between the saccus endolymphaticus and the internal auditory meatus. This can be utilised as part of the dural incision if such is required. The cochlea is uncapped and in cases of meningitis cleared through to the internal meatus. In cases in which the symptoms are so threatening that there is scarcely time for opening the canals as described, the operation may be limited to the opening through the cochlea. For cerebellar abscess the necessary exposure may be effected through Trautmann's triangle, but if this is very small a considerable amount of the petrous bone must be removed.

JAMES DUNDAS-GRANT.

The Cerebellum in its Relation to the Development of Spontaneous Nystagmus. D. DEMETRIADES and E. A. SPIEGEL, Vienna. (*Zeitschrift für Hals-, Nasen-, und Ohrenheilkunde*, Band xix., Heft 3, p. 250.)

Experiments carried out on guinea-pigs showed that when there was nystagmus to the sound side caused by removal of one labyrinth, and this had reached the stage of compensation, the destruction by cauterisation of the cortex of the ipso-lateral cerebellar hemisphere (without involvement of cerebellar nuclei or bulbar terminations of the vestibular nerve) changes the nystagmus to one directed towards the side of the eliminated labyrinth.

JAMES DUNDAS-GRANT.

Aural Systemic Infection. R. D. OWEN. (*Lancet*, 1927, ii., 1390.)

The writer gives his observations upon the case of a girl of 13 on whom a mastoid operation showed pus under pressure, without other complications. Two days later temperature was 105° F., with anomalous symptoms. Lumbar puncture showed fluid under pressure. Next day the internal jugular vein was ligatured and cut. A blood culture showed *Streptococcus longus hæmolyticus*. Serum was used and, fourteen days

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later, the chest was aspirated, and ten days after, an empyema was evacuated. The case recovered. The writer distinguishes between a toxæmia and a bacteriæmia in these systemic infections, and discusses methods of diagnosis and treatment and the place therein of blood transfusion.

MACLEOD YEARSLEY.

The Operative Treatment of Suppurative Meningitis. Dr SIMONT.
(*Zentralblatt für Hals-, Nasen-, und Ohrenheilkunde*, 1927, Vol. xi., page 209.)

In meningitis of traumatic origin, the correct treatment is trephining of the area of skull involved, incision of the dura mater, removal of bone fragments and foreign bodies, and careful drainage of the infected regions. Should the infective focus be in the orbit or in an accessory nasal sinus, drainage of this should be undertaken without delay. In meningitis of aural origin, which of all types is the one most frequently observed, the first step must be free resection of the mastoid process and free exposure of the dura mater of the middle and posterior fossæ. In every case of chronic middle-ear suppuration, the tympanic cavity should be opened. Pressure by excess of exudate in the subarachnoid system must be relieved by the usual punctures, or a more permanent drainage must be established. After lumbar puncture, puncture of the cisterna magna takes next place. Ventricle puncture is contra-indicated by the danger of infecting the poorly resisting brain substance. For permanent drainage, the cisterna pontis and the cisterna cerebello-medullans are most suitable.

To achieve this in the cisterna pontis, it is sufficient to strip up the dura mater and to open the subarachnoid space in the region of the porus acusticus internus. Similarly the cerebello-medullary cistern can be reached through the occipito-atlantal membrane, where the ligament separates to form a triangular space. The author's experience has been that continuous drainage is much superior to lumbar puncture. Up to now, the results attained show success of the methods adopted, and to-day the prospects of cure have improved beyond comparison. The author emphasises the vital importance of early operation.

F. W. WATKYN THOMAS.

Rapid Death of Infants operated upon for Retro-auricular Abscess of Mastoid Origin. (*Archives. Internat. de Laryngol.*, March 1928).
Professor G. CANUYT (Strasbourg).

The clinical picture of a typical case is as follows: After usually a very short operation, the child is placed in bed and recovery from the anæsthetic is normal. Some hours later, facial pallor is noticed and the infant hitherto quiet becomes restless. The pulse is rapid and thready and the temperature is raised. Occasionally there are

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convulsions. Later the temperature exceeds 104° F., the pulse cannot be counted and the child is unconscious. The condition is one of collapse. Death ensues within a period of twelve to forty-eight hours. Clinical examination and autopsy reveal nothing as to the cause of death.

The two cardinal features in such cases are pallor and hyperpyrexia.

The author proceeds to recapitulate the facts known to the physician about infants dying suddenly from many apparently trivial causes. In all these cases the same two features are observed: facial pallor and hyperpyrexia.

An analysis is made of all the possible causes of sudden death in infants operated upon for mastoid abscess. According to the author the most likely factors are: general anæsthesia, shock and septicæmia.

Accordingly, these operations should be carried out, under local anæsthesia, as rapidly as possible, and possibly without even opening the tympanic antrum.

The technique now advised is as follows:

- (1) An efficient myringotomy.
- (2) Local anæsthesia with eythl chloride spray.
- (3) Simple incision and evacuation of the post-auricular abscess.

The author acknowledges that the real cause of the sudden death has not been established. Since employing the above technique, however, he has not had any deaths.

MICHAEL VLASTO.

THE NOSE AND ACCESSORY SINUSES.

Osteomyelitis of the Superior Maxilla in the Infant. DR BERTHEMÈS.

(*Annales des Maladies de l'Oreille, du Larynx, du Nez, et du Pharynx*, June 1927.)

Osteomyelitis of the superior maxilla in infants is a rare condition, only about fifty cases having been previously recorded.

The author describes his own case occurring in an infant only two weeks old. The lesion was in the region of the canine fossa and communicated with the nasal chamber of the same side. Operative treatment consisted in carefully curetting away the granulations and bony necrosis, and enlarging the opening into the nose. At the same time an abscess of the mother's left breast was incised. Staphylococci and cocci of the tetragenus group were found. The wound healed well and the patient progressed normally.

In discussing the nomenclature the author prefers the term acute suppurating osteo-folliculitis of the maxilla to mark the characteristic point of attack in the dental follicle of the maxilla. Further he discusses the etiology pointing out that this is an osteitis of local origin, invasion occurring by the lacrymal channels, the nose or mouth, and the infection itself originating from the genital passages

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or breast of the mother. In his own case the mother at the time of the child's birth had an abscess of the vulva. The superior maxilla is more commonly attacked than the inferior, this depending on the fact that the path of infection is usually viâ the nose.

The question of the extent of operative treatment he claims to be an important one since on it will depend the risk of destroying dental follicles, of causing orbital complications and the need of possible subpalpebral incisions, the multiplication of sequestra, respiratory complications, and perhaps a general infection. In his own case he successfully avoided any of these by limiting the extent of his curettage.

L. GRAHAM BROWN.

On the Present Position of the Doctrine of the Etiology and Therapy of Ozæna. DR EDMUND WERTHEIM. (*Archiv. für Ohren-, Nasen-, und Kehlkopfheilkunde*, Bd. 117, Heft 3, March 1928.)

Dr Wertheim of Breslau has observed reduction of fœtor and crusting in cases of ozæna after subcutaneous injections of ozænanasan, which is a toxin-antitoxin diphtheria serum. Six injections are given at intervals of five days, the first consisting of one ampoule No. 1, the remainder each of one ampoule No. 2. An illustrative case is described in detail.

This paper is presented in the form of a critical review, with a compendious Bibliography of recent contributions on the subject. Stress is laid upon the early onset of the disease, and on the diverse constitutional and conditioning causes which lead to the characteristic changes in the nasal mucous membrane.

W. O. LODGE.

Bromide in the Treatment of Hay Fever. FR. HAMBURGER.
(*Münch. Med. Wochenschrift*, S. 852, Nr. 20, Jahr 74.)

Hamburger has found that the administration of grm. i of sodium bromide or of one tablet of sedobrol in warm water in the fore- and afternoon half an hour before going out of doors, is a valuable means of relieving hay fever in many cases. The result varies in different individuals, but the hope of relief should not be abandoned until the remedy has been persisted in for at least a week.

J. B. HORGAN.

A New Method of Partial Rhinoplasty. DR E. DUJARDIN, Copenhagen.
(*Lancet*, 1928, i., 1280.)

The author describes a method used in a case in which injury, followed by gangrene, had destroyed the tip and outside walls of the nose. A triangular piece of the lobule of the ear was applied to form one side of the nose and the outer wall of the nostril. The full technique is described and the author believes the method is new, gives a good cosmetic effect, and is practicable under local anæsthesia.

MACLEOD YEARSLEY.

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Experimental Sore Throat. GEO. F. DICK, M.D., and GLADYS HENRY DICK, M.D., Chicago. (*Journ. Amer. Med. Assoc.*, Vol. lxxxix., No. 14, 1st October 1927.)

The authors review conclusions of their experiments reported from 1921 to 1923. Scarlet fever streptococci may cause sore throat without the exanthem. They also describe three distinct experiments where hæmolytic streptococci obtained from skin lesions in erysipelas produced, on inoculation, an acute angina in three out of five volunteers. The anginas were characterised by fever, leucocytosis and the general clinical picture of ordinary sore throat or tonsillitis without the skin manifestations of erysipelas. Six volunteers were inoculated with filtered cultures, and all remained well.

ANGUS A. CAMPBELL.

New Observations on the Ulcerative Stomatitis and Angina of Plaut-Vincent. V. JELINEK, Zagreb. (*Acta Oto-Laryngologica*, Vol. xi., Fasc. iv.)

From August 1924 to November 1926 the author had occasion to observe a large epidemic of ulcerative stomatitis and angina of Plaut-Vincent. Four hundred and nine cases occurred, all coming into hospital; they were scrupulously studied and followed up.

The article deals with the etiology, the mode of spread, the clinical picture, the progress, treatment and prognosis of the disease from observations made during this epidemic. Ninety-five per cent. of these cases occurred in one infantry regiment of a large garrison, the remaining 5 per cent. being found in other units and these resulted chiefly from direct contact infection with the patients of the larger group. Two cases upholding the view of contagion showed secondary infection of the fingers—Perionychia. The author's observations do not in any way support the theory of avitaminosis, and neither is that theory supported which suggests a general upset of physiological equilibrium of the buccal mucosa during the eruption of the wisdom teeth. The infective agent is the spirochæte of Plaut-Vincent, which lives in symbiosis with the bacillus fusiformis. The former is the aggressive element—the latter completes the work of destruction, or lives as a parasite on the products of inflammation. At the height of the disease spirochætes are found in pure culture, passing away on recovery, whereas the fusiform bacillus persists for some time. The clinical picture varies with the localisation and the duration of the attack; also varying with the individual constitution of the patient.

The tonsils were infected in 15 per cent. of the cases. In all cases the diagnosis was confirmed by microscopical examination and by varied staining, dark ground illumination being also used. In all cases cure was brought about by the method of freezing; no other active

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intervention was allowed during the acute stage, such as the removal of tartar and bad teeth.

The prognosis was favourable, all the patients getting better in a few days. Recurrences occurred in 8 per cent. of the cases. The treatment of the ulcers by freezing was carried out either by an ethyl chloride spray or small pieces of ice held in forceps. The author believes the incubation period to be about three days.

H. V. FORSTER.

MISCELLANEOUS.

Transitional-Cell Epidermoid Carcinoma. Drs QUICK and CUTLER, New York. (*Surgery, Gynæcology and Obstetrics*, September 1927, Vol. xlv., No. 3, p. 320.)

Under this title the authors record a series of twenty cases of new growth arising in the tonsil, tongue, and pharynx, of specific histological structure, and clinical history, and alike in their sensitiveness to radium. The transitional-cell carcinoma is a highly cellular, malignant tumour. The cells are small, uniform in size with large hyperchromatic nuclei and scanty cytoplasm, growing diffusely and sometimes forming solid cords. No cell-nests are found. The transitional epithelial cells of the region are suggested as the most likely origin of the tumour.

Clinically, rapid enlargement of the lymph nodes of the neck, while the primary growth is small, is usual; in thirteen cases the first symptom complained of was enlargement of the neck, and in five cases exhaustive examination failed to find the primary growth at that time. The primary lesion has a fine, granular, velvety surface and looks like an erosion of the mucous membrane. It is flat and gives the impression of arising in the deeper layers of the region.

Treated by radium tubes and X-ray to the neck, rapid disappearance of the mass results. Recurrence, either local or visceral, has occurred in fourteen cases, while six have remained free of recurrence during periods of two years or more.

The authors found tumours composed of this type of cell formed about one-tenth of all intra-oral carcinomata.

Summaries of the twenty case histories are given, but the radium and X-ray dosage, except in one case, are not recorded.

There is no adequate bibliography.

S. ADAMS.

The Encapsulated Tumours of the Nervous System. WILDER PENFIELD, New York. (*Surgery, Gynæcology and Obstetrics*, August 1927, Vol. xlv., No. 2, p. 185.)

In an attempt to throw light on the ultimate origin of these tumours, the author used the silver staining methods of Del Rio Hortega and Cajal, by which the intercellular substance could be studied.

In the acoustic nerve tumours he found the intercellular fibres were

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not neurological, and not nervous in nature, but represented a particular form of collagen.

The fibres were long, slender, and wire-like, resembling normal nerve connective tissue. These fibres are especially numerous in traumatic neuromata and form a constituent of connective tissue elsewhere. In these acoustic tumours they were almost the only connective tissue fibre present, and in regions where the cell nuclei were palisaded, the fibres were also palisaded in the same direction. He suggests this arrangement of the tumour cells results from the arrangement of the connective tissue fibres.

The author concludes Mallory was right in regarding these tumours as perineural fibroblastomata, provided the neurofibromata group be excluded.

Several microphotographs are produced and adequate references are given.

S. ADAMS.

The Cerebrospinal Fluid in the Diagnosis of Tuberculous Meningitis.
DONALD STEWART. (*Edinburgh Medical Journal*, March 1928.)

The early diagnosis of tuberculous meningitis in children is often difficult, as the onset is insidious and the disease may simulate many other conditions. Examination of the cerebrospinal fluid offers the most accurate means of differential diagnosis in children. Cistern puncture is as easy and safe as lumbar puncture, and the fluid may be withdrawn by this method. In a series of thirty cases examined by the writer, the cell-count was increased in several cases, and in twenty-five cases the total protein was also increased. Total sugar was diminished, and the chlorides varied in amount, but were within normal limits. In a series of forty-two cases of tuberculous meningitis, tubercle bacilli were found in the cistern fluid in every case.

DOUGLAS GUTHRIE.

REVIEWS OF BOOKS

Die Akute Mittelohrentzündung als Kinderkrankheit. VON DR ADOLF
FR. HECHT. (Wien: Julius Springer, 1928.)

This small monograph of 120 pages, written by a pediatrician, contains much valuable information and many statistical data. The best part of the book, dealing as it does with otitis complicating infectious diseases, deserves the attention of the otologists of fever hospitals. The various sections deal with the relationship of otitis to scarlet fever, measles, diphtheria, pneumonia, influenza, etc., indeed the writer mentions only nine cases of "genuine" otitis, for which no cause could be found. A number of instructive tables and charts illustrate the work. Only a brief reference is made to the latent otitis of infants, and the extensive researches of French observers in this subject, receive no mention, nor is there any note of the recent American work on the relationship of otitis to gastro-intestinal infection in early life.

DOUGLAS GUTHRIE.