ABSTRACTS

THE EAR.

The Treatment of Chronic Eczema of the Ear by Means of Protein Bodies. H. STERNBERG, Vienna. (*Zeitschrift für Hals-, Nasen- und Ohrenheilkunde*, Band xvii., Heft 2, p. 200.)

Such protein bodies as Aolan, Caseosan, Phlogetan, Autoserum, and Autovaccine were injected intramuscularly generally into the glutei. They were found to have a highly beneficial effect on the intercurrent inflammatory outbreaks and furuncles, but none on the established chronic eczematous condition.

JAMES DUNDAS-GRANT.

Treatment of Acute Traumatic Hematoma of External Ear. HARRY A. BRITTON, M.D., Ithaca, N.Y., Athletic Physician, Cornell University. (*Journ. Amer. Med. Assoc.*, Vol. lxxxix., No. 2, p. 112, 9th July 1927.)

The author has treated nearly 100 cases during the last five years, and feels that a perfect result may be obtained if the hematoma is first aspirated and sufficient pressure applied to the anterior and posterior surfaces so that perfect apposition is obtained. Aspiration may be done any time up to five days and pressure should be applied for a week. Care must be observed not to injure the ear during convalescence. In the depressed part of the ear various appliances are used such as a moulded copper wire covered with adhesive tape, plaster of Paris, or collodion and cotton. As a prophylactic measure the author recommends a cotton pad to the front and back of the ear, bound close to the head with adhesive tape $1\frac{1}{2}$ in. wide and 30 in. long.

ANGUS A. CAMPBELL.

Perforation of the Tympanic Membrane as a Cause of Drowning whilst Swimming. FRANZ BRUCH. (*Münch. Med. Wochenschrift*, S. 897, No. 21, Jahr. 74.)

Bruch gives it as his opinion that many of the drowning fatalities which overtake competent swimmers are not due to sudden heart failure, etc., but to the entry of cold water into an unprotected tympanum. This induces labyrinthine irritation and disturbances of equilibrium, and the individual drowns owing to the absence of his sense of orientation.

Persons with perforated ear drums need not on this account debar themselves from the pleasure of swimming, but they should be

instructed as to the potential danger and as to the necessity of protecting themselves from the same by the insertion of a cone of well-vaselined cotton wool into the meatus prior to entering the water. J. B. HORGAN.

Prognostic Experiments on the Activity of Virus in Otology according to Skajaa's Method. W. HORBOE, Oslo. (*Acta Oto-Laryngologica*, Vol. x., Fasc. 3-4.)

The author refers to a lecture by Skajaa of Oslo on his modified method of testing the virulence of bacteria in the vaginal secretion. His results awakened considerable interest because, by means of these tests made with various gynæcological and obstetrical material, he was able to predict with striking accuracy. The author thought he would carry out similar tests in conditions of doubtful prognosis in otological practice, particularly in otogenous pyæmia.

The study of virulence is far from new, but an experiment by C. Ruge of Berlin is interesting. He mixed a patient's own infected material containing streptococci and staphylococci with defibrinated blood from the patient. The important point in the experiment was that the bacteria had not been previously isolated by cultures. The infected material itself was added to the blood.

A single subculture may be sufficient to cause bacteria to become avirulent. Ruge incubated the mixture for three or four hours and then compared the numbers of extra and intra-cellular bacteria by the direct microscopic method. Another colleague, Phillip, modified the test, using melted agar.

The writer of this article proceeded as follows:—20 c.c. of blood is taken from the brachial vein, defibrinated, and 5 c.c. transferred into each of three sterilised test glasses. The infected material is suitably diluted with salt solution, or bouillon, and added in small but increasing quantities to the series of three tubes; half a c.c. is taken from each glass and sown with melted agar in a Petrie dish and incubated in a thermostat. The test glasses are also put in the thermostat but kept continually shaken by a suitable machine. After three hours a new plate culture with agar is made from the blood mixture in the test glasses, and after twenty-four hours colonies are compared. If the material is virulent the colonies increase, if avirulent they decrease in number. Examples are quoted from two cases of sinus thrombosis in which the tests were tried. The use of the tests in otological infections is discussed. H. V. FORSTER.

The Diagnosis of Mastoid Disease. W. J. HARRISON, M.B. (*Practitioner*, August 1927.)

The usual text-book description of mastoid disease must not be relied upon. In practice any or all of the accepted symptoms may be

absent. There may be no temperature and no disturbance of the pulse-rate, no discharge from the ear and no swelling of the mastoid displacing the auricle: there may be neither pain nor tenderness, or there may have been discharge for a day or two with apparent resolution in the middle ear while the disease proceeded in the mastoid cells.

Stress is laid on the following points in diagnosis, and cases are cited in illustration.

(1) The membrane should be carefully inspected. It may be injected, bulging or œdematous. Pus reappearing quickly from a small perforation after mopping may be a sign of a considerable collection of pus behind.

(2) Pain is one of the most valuable symptoms and varies with the density or otherwise of the bone and the pressure of the retained pus.

(3) Tenderness ranks in importance with pain, and like pain depends partly on the character of the bone. The situations to examine carefully are (*a*) over the antrum, (*b*) the point of emergence of the emissary vein, (*c*) the mastoid tip.

(4) Bulging of the posterior wall of the bony meatus is sometimes of considerable value.

In cases of doubt, it is safer to operate than to wait for something definite to develop. T. RITCHIE RODGER.

Mastoid Abscesses due to the Pneumococcus Mucosus. F. LEMAÎTRE, M. LEVY-BRUHL, and A. AUBIN. (*Archives Internationales de Laryngologie*, June 1927.)

This work embodies and exemplifies the value of the combined researches of the laboratory and the clinician. It is a study of a special variety of middle-ear suppuration due to the streptococcus mucosus.

The laboratory contributes a historical and bacteriological account of the micrococcus mucosus. This is found to be more closely related to the pneumococcus than to the streptococcus. In support of this view, one might mention its solubility in bile and its fermentation of inuline.

Clinically, middle-ear suppuration due to the coccus mucosus is not uncommon. It was found to be present 25 times in 265 cases. The majority of the cases were those of adult males who were in a constitutionally debilitated condition.

A feature of this variety of mastoiditis is its insidious onset. There is very little pain, and frequently no pyrexia. The patient, on the other hand, looks extremely ill. The pus from the tympanic cavity is characteristically serous, yellowish in colour, and scanty.

The germ has a predisposition to attack and destroy bone. Within

a few days there may occur an extensive necrosis which lays bare the meninges. Meningitis may break out like "a storm in a clear sky," and the prognosis is therefore very grave.

The authors lay stress on the valuable information that may be obtained from radiography of the mastoid bone.

Treatment should be immediate, and extensive surgical interference carried out. Sequestra should be removed with the minimum of disturbance of healthy bone. MICHAEL VLASTO.

Mucosus Otitis. To what extent should it be recognised as a Clinical Entity? Privatdozent Dr A. ECKERT-MÖBIUS, Halle a.S. (*Archiv. für Ohren-, Nasen-, und Kehlkopfheilkunde*, Band cxvi., Heft 4, August 1927.)

This contribution covers sixty-six pages. It reviews the progress of our knowledge of the anatomical, pathological, and clinical peculiarities of the disease from the isolation of the streptococcus mucosus by Schottmüller in 1903. There are three coloured plates illustrating the bacteriology and histology. The morphology of this capsulated micro-organism, its cultural characteristics — notably low virulence and its susceptibility *in vitro* to optochin and to ox bile—and the grounds for describing it as pneumococcus mucosus are given in detail.

The scope of a bacteriological study covering a period of three years, relating more especially to 128 antrotomies, is next outlined. Pneumococcus mucosus was found in 23 cases (18 per cent.). A number of the cases are described in the text, the remainder in tabular form. Some of the more salient features are as follows, the figures being derived from combined statistics of the principal series of cases hitherto recorded.

Frequency.—In acute otitis media the relative frequency of the three principal causative organisms are—streptococcus pyogenes about 60 per cent., mucosus 15 to 20 per cent., pneumococcus 5 to 10 per cent.

Age Incidence.—Streptococcal and pneumococcal acute infections are common in infancy and progressively rarer in later life.

Mucosus infections are rare in infancy and relatively more frequent in adult life up to the sixth and seventh decades.

Sex Incidence.—Mucosus infections are five times more common in males than in females.

Pneumatisation Type.—In 90 per cent. of mucosus infections well-developed air-cells were found. The bearing of this upon the character of the mucous lining and the importance of radiography in the detection of retrosinus and zygomatic cells is discussed.

Symptoms and Signs.—The onset is insidious. Fever is slight or

absent. Local signs are delayed in appearance. The tympanic membrane shows pallid infiltration, a condition of slight swelling, with absent light-reflex and obscuration of the handle of the malleus. This is the "blasse Infiltration des Trommelfells" described by Stütz. Spontaneous perforation is infrequent. Sagging of the posterior meatal wall may be seen, but redness and tenderness over the mastoid process is delayed in appearance. The otitis is typically subacute, running a protracted course.

Clinical Variations.—(*a*) An interval or relapsing form, (*b*) a protracted progressive form, and (*c*) a more acute form are also described.

Complications.—The frequency of complications in streptococcal otitis is scarcely 40 per cent. The figure for pneumococcal infections is probably about 5 per cent. In mucosus otitis, complications arise in nearly 80 per cent. of cases. This alone justifies an emphatic answer "Yes" to the question as to whether mucosus otitis should be recognised as a separate clinical entity.

Extradural and perisinus abscesses are the most frequent sequelæ. Mucosus labyrinthitis and meningitis run a latent course at first, and flare up in the later stages of the disease, sometimes shortly after an operation has been carried out. This type of meningitis, once manifest, is fulminating in character, and may be fatal within a few hours. Brain abscess also occurs, and in one case of sinus thrombosis here recorded a metastatic perinephritic abscess developed.

Treatment.—Air douching after paracentesis is often necessary in order to obtain a droplet or two of mucoserous secretion for microscopy and culture. Radiography of the mastoid process is strongly advised. The treatment is essentially operative, spontaneous healing being relatively improbable. Primary suture is inadvisable, on account of the large cavity and danger of relapse. Rigid asepsis is called for in the dressings, in order to avoid secondary infections. Ox bile and optochin have been utilised with advantage, but naturally cannot be expected to have quite the lethal effect upon the organism demonstrable *in vitro*.

Conclusion.—The author considers that mucosus otitis merits a separate description in the text-books of otology, on account of its peculiar and fatal tendencies.

A comprehensive bibliography is appended. W. O. Lodge.

Traumatic Phlebitis of the Lateral Sinus. P. Corner. (*Annales des Maladies de l'Oreille, du Larynx, du Nez, et du Pharynx.* June 1927.)

The writer, whilst admitting, like most other authors, the relative benignity attached to the accidental wounding and exposure of the lateral sinus in the course of operations in the mastoid, draws con-

clusions from clinical observations in his own cases. He studies the anatomy of the sinus, the etiology of infection and pathological anatomical results of the latter, as to how such risk of complications may be best minimised, and, when they do occur, what lines of treatment should be adopted.

Thus he reminds us of the variable disposition of the lateral sinus, the larger size of the right one, the absence of any definite landmarks on the mastoid surface as useful guides to the underlying sinus, the relatively more frequent anterior and superficial position of the sinus in sclerosed types of mastoid (especially the right mastoids of brachycephalic adult females); hence there is the need of continued caution on the part of the surgeon during the first removal of the mastoid cortex with the gouge. When the lesion to the sinus has occurred, he insists on the completion of the full operation, however great may be the added difficulty.

From his clinical observations he concludes that with infection of the sinus one of two conditions may occur, viz. (*a*) phlebitis with pyæmia, or (*b*) localised thrombophlebitis without pyæmia.

As regards the pathological anatomy, he agrees that the following conditions may occur:—(*a*) periphlebitis; (*b*) thrombophlebitis; (*c*) suppurative and gangrenous phlebitis, and (*d*) pyæmia without thrombophlebitis.

His method of treatment depends on whether pyæmia has or has not occurred. In the latter case, if at reintervention an organised thrombus is found and the general condition is otherwise satisfactory, abstention is the absolute and formal rule. If, however, it is seen that partial suppuration of the thrombus has occurred, the latter must be carefully incised without causing the least disintegration of the clot. In both eventualities the post-auricular wound must be kept well open for inspection.

When pyæmia has occurred, he advises complete removal of the thrombus, even though this may necessitate exposure of "the jugular bulb," and furthermore ligation of the internal jugular vein when the general symptoms of pyæmia persist. L. GRAHAM BROWN.

Thrombosis of the Lateral Sinus, with Erosion of the Overlying Bone, the Sinus having been Opened and Drained through a Skin Incision. E. M. SAYDELL. (*Laryngoscope*, No. 1, Vol. xxxvii., p. 52.)

A female, aged 25, had an attack of influenza in January 1926 and was confined to bed for three or four days. A week after the onset of the influenza, she developed severe pain in the right ear, and the membrane ruptured spontaneously after a week of pain, which, however, was not relieved in spite of the discharge. A peritonsillar abscess developed which subsided without lancing. A week later the drumhead

was incised and conservative treatment followed for a period of four weeks. Pain was present during the whole time. Four months after the onset of influenza, a mastoid operation was performed on the right ear. Pain, discharge and fever continued for three weeks, when a swelling appeared over the right temporal region and behind the mastoid. The right eye was also black and swollen. An abscess was opened at the upper part of the mastoid incision with some relief of pain, but the symptoms returned in a week.

In May 1926, the author was consulted for pain, generalised headache, fever, soreness and stiffness in the right side of the neck, but no rigors or high fever. There was a small discharging wound in the right mastoid area; no spontaneous nystagmus. The discharge from the meatus was foul-smelling. The perforation was central and the postero-superior canal wall drooped. The entire mastoid was œdematous and tender. The neck was tender and somewhat rigid along the right sternomastoid. The streptococcus mucosus capsulatus was isolated from the ear. X-rays showed that the antrum had not been opened and a clean cut opening was visible which corresponded to the knee of the lateral sinus. The mastoid wound was reopened. A narrow cavity filled with pus occupied the central portion of the mastoid process, and about 6 mm. above this a clean-cut, round opening plugged with granulation tissue was observed. The antrum was opened for the first time and the sinus was found uncovered below the knee, but at this point it appeared to be normal. The sinus was further exposed and found to be thrombosed behind the knee; its outer wall had been destroyed by infection, which had also caused an erosion of the overlying temporal bone. Much pus was removed from the thrombosed area. No attempt was made to establish a flow of blood from either end of the sinus. Recovery was uneventful following the first operation, the patient had developed a sinus thrombosis which destroyed the outer wall of the sinus and eroded the overlying bone, and, finally, presented itself as a fluctuating swelling above the upper end of the mastoid incision. ANDREW CAMPBELL.

THE NOSE.

Perforation of the Nasal Septum. L. BLUMENFELD. (*Laryngoscope*, Vol. xxxvi., No. 5, p. 333.)

The operation described is ingenious and ought to be reasonably easy to perform.

A curved incision is made anterior to the perforation and the muco-perichondrium is mobilised—as a flap which may be pulled backwards so as to cover the perforation. Two triangular flaps, one below and the other above the perforation, are outlined, reflected and rotated so that their mucous surfaces fill the gap on the opposite side

of the perforation. The sliding of the anterior flap backward now brings two raw surfaces together. The flaps are sutured with the minimum amount of black silk stitches. The only raw surface left is anterior to the perforation. Vaseline packing is introduced for twelve to twenty-four hours and efforts made to prevent crusting within the nose. ANDREW CAMPBELL.

Report of a Case with an Unusual Condition Involving the Nasal Septum. E. S. HALLINGER. (*Laryngoscope*, Vol. xxxvi., No. 7, p. 509.)

In the course of a submucous resection of the nasal septum, on removal of the quadrilateral cartilage, the postero-superior part was unduly thickened, almost a quarter of an inch in thickness. The perpendicular plate of the ethmoid had a sharply defined cortex with intercortical bone of the soft spongy cellular type. On removing this thick bone upwards, a large cavity was suddenly encountered high up in the perpendicular plate of the ethmoid. The cavity was half an inch long and about a quarter of an inch at its widest. It did not appear to be lined with mucous membrane, was free of secretions and did not communicate with any other part of the nose. Its roof, apparently, formed part of the cribriform plate. The right middle turbinal was found to be absent, but a large polypoid mass was removed from this area first.

The author suggests that the absence of the turbinate with the presence of a closed cavity or ethmoid cell in the perpendicular plate of the ethmoid, would seem to point to some relationship one with the other, probably a transposition. ANDREW CAMPBELL.

The Bleeding Septum-Polypus. WILHELM SCHREYER (Breslau). (*Zeitschrift für Hals- Nasen- und Ohrenheilkunde.* Band xvi., Heft. 1, p. 41.)

From the examination of thirteen typical cases it can be affirmed that the septal polypus is "an abnormal proliferating angioma." The main bulk of its substance consists of "cell-capillary-islands," which are tangled masses of growing angioblastic tissue with capillaries. They can be distinguished from malignant endothelioma or sarcoma by the cells in the latter being wilder in their growth, less differentiated and more wanting in form and arrangement. In these also there is a tendency to bilateral thickening and an absence of the pedunculation usual in the "bleeding polypus." There seems to be no dependence of the polypus on a pre-existing anterior rhinitis sicca or traumatism.

JAMES DUNDAS-GRANT.

Abstracts

Chancre of the Nasal Septum—report of three cases. ERWIN P. ZEISLER, M.D., Chicago. (*Jour. Amer. Med. Assoc.*, Vol. lxxxviii., No. 22, 28th May 1927, p. 1702.)

During the past five years the author saw three cases. Each patient had scanty nasal discharge, and an indurated, granulomatous ulcer of the anterior portion of the septum. The ulcers bled easily and showed no tendency to heal. There was no perforation. Dark field examination showed spirochæta pallida. In two cases the Wassermann reaction was negative early but very strongly positive later. One early case never developed a positive Wassermann. One case had cervical glandular swelling with a syphilitic rash, and one had a massive bubo in the submaxillary region. ANGUS A. CAMPBELL.

Angioma of the Nasal Septum. GIUSEPPE G. CARRARI. (*Archivii Italiani di Laringologia*, Anno xlvi., Fasc. 1-2, February 1927.)

The author describes a case of pure angioma of the nasal septum in a woman of thirty-two. Very shortly after obstruction was first noticed epistaxis began and the nose became completely blocked on the left side. Examination showed a red sessile tumour attached to the septum in the area of Valsalva and showing superficial ulceration. It was removed under local anæsthesia and on microscopic examination was found to be a pure angioma with a round celled infiltration, and a necrosis of the covering epithelium in one place. The blood spaces were large and not capillary in type.

The causative factors in such tumours are difficult to determine, and many suggestions have been put forward including one that a localised Leishmaniasis is responsible.

The author remarks that his case does not help to elucidate the question. F. C. ORMEROD.

Rhino- and Pharyngoplasty. Professor JACQUES. (*L'Oto-Rhino-Laryngologie Internationale*, 26th June 1927.)

The author describes his methods of dealing with nasal and pharyngeal adhesions. Bridge adhesions from turbinate to septum are removed and the nose packed until the raw surfaces are epithelialised from above and below.

When the adhesion unites the septum, turbinate and nasal floor, it must first be converted to the bridge form by making an epithelialised tunnel close to the floor of the nose. This procedure is carried out by perforating the adhesion by galvano-cautery and inserting a stout silver wire along the track of the cautery. When the tunnel is epithelialised, usually at the end of a fortnight, the wire is removed and the adhesion divided.

A similar method is employed for pharyngeal adhesions; the adhesion is perforated at its lateral extremities by a curved Reverdin's needle, a small rubber drainage tube is passed through these openings and the free ends of the tube are tied in the mouth. At the end of a month the intermediate bridge can be divided with a galvano-cautery snare and the nasopharynx packed for three weeks.

C. GILL CAREY.

Nasal Headaches. E. MILES ATKINSON, M.B., F.R.C.S. (*Brit. Med. Journ.*, 13th August 1927.)

Two conditions in the nose may give rise to headaches, infection of the accessory sinuses and any form of nasal obstruction.

The writer emphasises the fact that the absence of apparent pus does not necessarily mean that the sinuses are all healthy. There may be very severe signs of toxic absorption due to sinus infection without any sign of pus in the nasal cavities. It is pointed out that the headache of antral suppuration may be frontal or generalised, while that of frontal sinusitis has the typical situation and very often the typical periodicity so often described. If the anterior ethmoid cells are involved with the frontal sinus, the headache is more persistent, and not so definitely matutinal. Sluder's vacuum headache is referred to. The writer does not think that suppuration in the sphenoidal sinus is a frequent cause of headache. Atrophic rhinitis may be accompanied by severe headaches, due probably to the collection of crusts in the sinuses, the mucosa of which participate in the atrophic condition.

T. RITCHIE RODGER.

MISCELLANEOUS.

Utilisation of Skin of the Upper Eyelid for Repair of small Facial Defects. J. EASTMAN SHEEHAN, M.D., New York. (*Archives of Otolaryngology*, Vol. vi., No. 2, August 1927.)

Sheehan reports immediate success in forty-six cases out of forty-eight by the above method of plastic surgery. The advantages are that the whole skin "takes" readily; there is no disfiguring scar resulting in the eyelid; restoration of the graft is rapid and is indistinguishable from the surrounding skin; often the scar cannot be seen; hospitalisation of five to eight days is reduced to a minimum. The only disadvantage is that in brunettes there is excessive pigmentation in the skin of the eyelid, but this disappears in one to three months.

DONALD WATSON.

Reviews of Books

Rectal Etherisation by Restricted Doses in Operations on the Face. M. JACOD. (*Annales des maladies de l'Oreille, du Larynx, du Nez et du Pharynx*, June 1927.)

From an experience based on more than 125 cases, Jacod speaks with authority on the question of rectal anæsthesia by ether injections prior to operations on the face, nasal fossæ, sinuses and mouth.

Unlike the Americans, who are accustomed to give massive doses by the rectum, the writer's technique consists in giving restricted doses and then producing complete anæsthesia by the ordinary buccal method of administration. He finds that by the time deep anæsthesia has been produced by the ordinary method the rectal injection has begun to act and is now sufficient in itself to prolong efficient anæsthesia during the period of operation. Subcutaneous injections of morphia are sometimes given to aid the latter. The ether dosage per rectum, varying according to the sex, age and weight of the patient, is from 60 to 80 c.c., and is mixed with 20 c.c. of camphor oil and 100 c.c. of olive oil, each dose being freshly prepared for each patient at the time of operation.

There are no contra-indications to the use of rectal ether except that the author prefers regional analgesia with novocain in operations on the larynx and hypopharynx.

The advantages claimed are numerous, the chief ones being, the clear field allowed for operation, the quick recovery of the patient and the small amount of post-operative vomiting.

L. GRAHAM BROWN.

REVIEWS OF BOOKS

Diseases of the Throat, Nose and Ear. DAN MCKENZIE, M.D., F.R.C.S.E., Surgeon, Central London Throat and Ear Hospital. Second Edition, with 3 coloured plates and 254 figures in the text. Heinemann (Medical Books) Ltd.: London. 1927. Price 45s. net.

IN the Preface, the author notes that increase in the knowledge and scope of the oto-laryngologist, during the life of the first edition of his book, has made it necessary to increase the size of the work by nearly one-third.

Malignant disease is very fully dealt with, from the point of view both of diagnosis and of treatment. The wide application of surgical diathermy is discussed, and the operative procedure in dealing with cancer in the various regions is fairly fully described. Due notice is taken of the greatly increased importance of the work of the endoscopist, while the gist of the investigations of Magnus and de