ABSTRACTS

THE EAR.

The Clinical Value of Radiography of the Temporal Bone.
P. L. MAGNIEN. (*Revue de Laryngologie*, December 1926.)

The article is prefaced by a short historical survey of the subject. There follows a description of the radiological technique for obtaining the most useful and practical skiagrams of the essential parts of the temporal bone.

From the point of view of clinical radiography, the temporal bone can be regarded as being composed of the following three portions:—

(1) The tympanic and mastoid bones.
(2) The petrous bone.
(3) The bony shell.

The most valuable indication for the radiography of the bony shell of the temporal bone is in cases of suspected zygomatic mastoiditis, where the various groups of outlying cells are clearly seen.

The degree of pneumatisation of the mastoid process can be very satisfactorily studied by radiology, and mention is made of the various views on the subject, including those of Logan Turner and W. G. Porter.

The author next proceeds to study the usefulness of radiology in pathological conditions of the tympanum and the mastoid cells. He states that it is possible from a careful reading of the negatives to distinguish between an inflammatory process of the mucous membrane, rarifying osteitis and empyema.

In the first case, there is a modification in the picture of pneumatisation. In the second case, there is a modification in the density, and where there is pus formation, there is a total obscuration of the structure. The author admits, however, that these distinctions necessitate the taking of a large number of photographs, and that the differential diagnosis between an empyema and a diploëtic mastoid is frequently impossible. Radiological diagnosis must in every case be subordinate to clinical diagnosis.

The author is not in agreement with those who hold the view that mastoid eburnation is a cause and not an effect of mastoid inflammation. He points out the assistance that radiology can give in deciding whether or not the mastoid cells are infected in cases of chronic suppurative otitis media.

Of further aid to the clinician, is the radiology of the petro-mastoid in cases of suspected tumours of the cerebellar-pontile angle. The alteration in the size, and the contour of the internal auditory meatus should particularly be noted. Two cases are quoted bearing on the point in question.

Lastly, it has been possible to demonstrate osteitis of the apex of the petro-mastoid in cases exhibiting Gradenigo's syndrome.

The paper is illustrated with diagrams and radiographs.

MICHAEL VLASTO.

Treatment of Lateral Pharyngeal Bands by X-rays in Cases of Deafness: report on 100 *cases.* D. CAMPBELL SMYTH, M.D., Boston. (*Annals of Otology, Rhinology and Laryngology*, December 1926.)

Dr Smyth undertook this investigation at the request of Dr Mosher in order to find out the actual value, if any, of X-ray treatment in chronic progressive deafness where redundant lymphoid tissue was present in the nasopharynx, especially in the lateral pharyngeal wall near the entrance to the Eustachian tubes.

Treatment is given every ten days for six treatments. Two portals of entry for the X-rays are used, the right and left sides of the neck over the upper pharynx and Eustachian tubes, the other structures in the neck being protected by lead. The factors used have been 8 inch-spark gap, 5 milliamperes, 3 millimetres aluminium filtration, 12 inch distance for five to eight minutes.

The hearing was carefully tested, including audiometer tests, before treatment, and again two weeks after the last treatment. From his results Dr Smyth concludes that treatment of enlarged lateral bands of lymphoid tissue by X-rays is an aid in cases of deafness and tinnitus of short duration. It is a distinct aid in cases of recurrent acute tubal deafness. Deafness of ten to fifteen years' standing showed no improvement. Most of the persons showing improvement were young, between 8 to 15 years old. There seemed to be no relation between improvement and the macroscopic appearance of the pharynx.

NICOL RANKIN.

Mastoiditis limited to the Deep Subantral Cells. J. B. HORGAN, M.B., D.L.O. (*Brit. Med. Journ.*, 12th February 1927.)

In this case there was severe pain in the ear and the temporal region for five days, with a history of discharge from the ear ceasing after three days. The membrane was hyperæmic only, and there was very little deafness. The persistence of pain and the onset of facial paresis on the same side indicated the need for exploration of the mastoid cells. The bone was very sclerotic and only a very small area was available anterior to the sigmoid sinus for approach to the antrum. A very deep antrum yielded some turbid fluid, and, scraping firmly with a small spoon downward from this behind the facial canal, an extension of the infection in that direction was found. The facial paresis disappeared quickly after the operation. The deep subantral cells may or may not communicate with the superficial subantral cells and the latter, as in this case, may be entirely absent.

The possibility of their infection must be always kept in mind as they are easily overlooked and extension of suppuration from them may complicate the aqueduct of Fallopius or cerebellar fossa, or the deeper planes of the neck. T. RITCHIE RODGER.

Experience of 266 Cases of Acute Mastoiditis: Contribution to the Question of Early Operation. BARWICH and HAARDT, Wien-Lainz. (*Zeitschrift für Hals-, Nasen-, und Ohrenheilkunde*, Band xvi., Heft 3, p. 325.)

Of the 266 cases, 34 followed influenza, 12 measles, 1 scarlet fever, 5 endonasal operations, 2 trauma (1 shell-wound, 1 box on the ear), 212 acute sore throat, coryza or no obvious disease. The bacterial excitants were as follows: Strept. pyog., 134 times; strept. mucos, 40; staphyl. pyog., 19; diploc. pneum., 9; bact. pneum. 2; bact. coli, 1; bac. pyocyan, 1; mixed infection, 8; sterile, 16; unidentified, 36. Death took place in 29, of which 25 were due to otogenic complications, 4 to other diseased conditions; recovery in 237, of which 215 were uncomplicated, 22 complicated. In regard to early operation, of 44 operated on between the first and ninth day, 38 recovered and 6 died; of 84 between the tenth and twenty-first, 73 recovered and 11 died; of 138 after the twenty-first day, 125 recovered, 12 died. The early operation has two special advantages, that the occurrence of complications is hindered and existing complications are revealed in good time. The only disadvantage admitted by the authors is the greater difficulty of the operation which they think is quite met by skill and familiarity with the position of the typical cell-groups on the part of the operator. Second operations are not more frequent after the early than after the delayed operation.

JAMES DUNDAS-GRANT.

THE ŒSOPHAGUS.

The Use of Sweet Almond Oil with Scuroform in Painful Œsophageal Spasms. J. GUISEZ. (*Bulletin d'Oto-Rhino-Laryngologie*, January 1927.)

This method, first published by Drs H. Surmont and J. Tiprez of Lille in 1924, has been found most useful by Guisez in the treatment of painful strictures of the œsophagus of an inflammatory or cancerous nature.

Scuroform is an insoluble, and hence a non-toxic, analgesic, and is employed in a 4 per cent. suspension of sweet almond oil for the following purposes:—

(1) As a local analgesic for carrying out simple dilatations of the pharyngeal end of the œsophagus.

(2) As a local sedative in cases of œsophagitis which are associated with spasm and cicatricial stenosis.

(3) As a local sedative in cases of impacted foreign bodies in the œsophagus during the hours which precede intervention.
(4) To relieve the pain which sometimes follows the application of radium. L. GRAHAM BROWN.

Acute Œsophageal Spasms of a Severe Type. J. GUISEZ. (*Bulletin d'Oto-Rhino-Laryngologie*, January 1927.)

The usual clinical picture of œsophageal spasm is described, wherein repeated attacks follow more and more closely upon one another until finally a permanent spasmodic contraction results.

In this article, however, the author wishes to draw attention to quite a different type. This is an acute spasm which is definitely and completely established at the first onset of symptoms without any remission of the latter, and which, by the subsequent stenosis, brings about a particularly critical condition.

He cites several cases which have come under his observation, emphasising the suddenness and completeness of the first attack, usually during a meal hurriedly taken; the little or no antecedent history; and the clinical resemblance to a labio-glosso-laryngeal paralysis or a spasm associated with epithelioma of the œsophagus.

Only œsophagoscopy can establish correctly the diagnosis, and it is then found that this severe and lasting spasm is almost always situated at the pharyngeal opening of the œsophagus, more rarely, however, at the cardia, and occasionally at both sites together.

The cause of the condition is unknown, no local lesion being found. It appears to be often associated with faulty mastication, in edentulous old people, but sometimes in young adults accustomed to bolting their food.

Treatment, which is always successful, consists in progressive and forcible dilatation of the sphincter by means of successive bougies of increasing calibre passing in turn over a guide through the stricture. This is a safer, more efficacious and less painful method than using a single large bougie. Sometimes preliminary feeding by a tube is necessary in order to strengthen the patient's condition and give rest to the œsophagus before dilatation is commenced.

L. GRAHAM BROWN.

MISCELLANEOUS.

On Endo-Nasal Block Anæsthesia of the Second Division of the Trigeminal Nerve. H. HEERMANN. (*Archiv. für Ohren-, Nasen-, und Kehlkopfheilkunde*, December 1926, Band cxvi., Heft. 1, 2.)

To inject novocain solution through the sphenopalatine foramen, which is only 4 to 11 mm. from the foramen rotundum, Heermann has had a tube made by Fischer of Freiburg, 140 mm. in length and as

stout as a Eustachian catheter, to be passed horizontally along the inferior meatus. It bends upwards 14 mm. from the tip, which terminates in a cannula 6 mm. long, directed 60° outwards at 70 mm. from the proximal end, which is adapted for a Record syringe, and carries a handle in line with the cannula; the tube is inclined downwards out of the line of vision. It is graduated in centimetres.

Full instructions follow for locating the area—suggestive of a fontanelle, and 3 to 9 mm. broad—immediately posterior to the middle turbinated bone. Here the injection is made.

Among other details, an autopsy after injection of colouring matter into the foramen is described. From a series of forty-two skulls the essential measurements and relevant anatomical variations are tabulated.

WM. OLIVER LODGE.

Further Experiences with Tutocain. G. DÜTTMANN. (*Münch. Med. Wochenschrift.*, Nr. 45, Jahr. 73, S. 1885.)

The writer has used tutocain for injecting anæsthesia for three and a half years, and has come to the conclusion that it may be looked upon as the universal anæsthetic. Owing to its anæsthetic power, and the very weak solutions which are effective in producing anæsthesia, it may be considered free from risk. He wishes it, however, to be understood that the injection of a large amount of a concentration greater than a $\frac{1}{4}$ per cent. can be rapidly toxic in action. The solution should be requisitioned by the surgeon for each individual case. As tutocain, when used alone, causes a slight hyperæmia, the addition of adrenalin is necessary; this tends to further diminish its toxicity.

J. B. HORGAN.

Experiences with Tutocain as a Local Anæsthetic. CARL FLECHTENMACHER. (*Münch. Med. Wochenschrift.*, Nr. 46, Jahr. 73, S. 1934.)

The opinion is expressed that tutocain is of approximately the same tóxic strength as novocain, but that it supersedes it in anæsthetic power. A 0.5 per cent. solution of tutocain will, in fact, be as effective as a 1 per cent. solution of novocain. The author has used it in a $\frac{1}{4}$ per cent. solution in 140 major operations, and has been, on the whole, satisfied with it. He considers that post-operative pain sets in later than when novocain is used. The anæsthesia is quicker in being attained. Bleeding appears to be greater than with novocain, and is not so readily controlled by the addition of adrenalin. Local irritative phenomena, or signs of general intoxication, were not observed. The ideal local anæsthetic should be even less toxic, and should require less, or better, no adrenalin in addition. J. B. HORGAN.

Abstracts

On the Technique of Suboccipital Puncture. L. BENEDEK and V. THURSO, Eugen. (*Münch. Med. Wochenschrift.*, Nr. 52, Jahr. 73, S. 2214.)

The advantage of carrying out suboccipital puncture in the sitting position is pre-eminently the ability to maintain the needle in the sagittal plane and thereby to avoid the possibility of wounding a posterior inferior cerebral artery. It has, however, the disadvantage that the pressure of the fluid is, apart from some pathological cases, negative.

With the object of raising the pressure sufficiently to ensure a flow, the writers have designed an elastic collar on which are two oval movable pads. The best position for the pads is 0.5 to 1 cm. below the thyroid cartilage and 3 to 3.5 cm. from the midline. There is a special device which allows of the collar being rapidly tightened and loosened.

In use the pads lie over the jugular veins, and after the latter have been compressed for from one-half to one minute the patient's bent head is held by an assistant, whilst the puncture is made with a mandarin-free needle after the method described by Ayer. After penetrating to a depth of 4 cm. the needle is only advanced slowly and with caution. The dura mater is pierced, and at a depth of from 4 to 6 (rarely 7) cm. the liquor flows. A drawing of the collar and two photographic illustrations of it in use accompany this article. J. B. HORGAN.

Oto-Rhino-Laryngology in Childhood. DOUGLAS GUTHRIE. (*Archives Internationales de Laryngologie*, February 1927.)

The subject-matter of this paper is the result of three lectures delivered in Paris.

The first of these lectures deals with diseases of the ear in infancy and childhood. The author prefaces his remarks with a warning against the viewpoint that the child is merely a smaller counterpart of the adult. He discusses the anatomical points of difference of the various parts of the ear in the young and the adult subject. Illustrations of specimens from the Cheatle collection depicting the various anatomical points accompany the text.

The author next discusses the various problems in connection with suppurative otitis media. He states that autopsies in infants show that pus is present in the middle ear in 80 per cent. of cases and calls particular attention to the condition of "latent otitis of infants." This manifestation of tympanic infection has attracted more attention in France than in this country. Typical of this condition is the fact that the tympanic membrane is neither bulged nor hyperæmic, but has lost its normal light reflex and has a ground-glass appearance. Paracentesis will effect a cure.

Passing on to the treatment of middle-ear suppuration, one gathers that the author is not more in favour of one kind of drop instillation

than another, provided that the cleansing of the meatus is very efficiently carried out. The author is not in favour of the radical mastoid operation in children except in tuberculous cases, and states that better results are obtained when the antrum is merely drained as in the Schwartze operation.

The second lecture deals with nasal infection in childhood. After discussing the anatomical points peculiar to the child, the author describes the various pathological conditions and the manner of dealing with them.

The last part of the paper deals with the diseases of the pharynx and larynx. The author discourses on the structure and function of the tonsils and discusses the indications and methods of their removal.

The various types of dyspnœa with their differential diagnosis and treatment are discussed.

The lectures conclude with a reference to endoscopic methods in children, particularly for the purpose of removal of foreign bodies, of which some interesting cases are quoted. MICHAEL VLASTO.

Fads and Fancies in the Practice of Otolaryngology. GEO. E. SHAMBAUGH, M.D., Chicago. (*Journ. Amer. Med. Assoc.*, 20th November 1926, Vol. lxxxvii., No. 21, p. 1720.)

The author refers to certain fads of the specialty, one of the most spectacular being the relation of nasal reflex neuroses to obstinate headache, neuralgia, cardiac, gastric, and uterine disturbances, especially dysmenorrhea; to show the extent to which some advocates have gone, he quotes Bosworth as saying "that he had seen no single case of spasmodic asthma in which the source could not be traced to the existence of some disease in the nasal cavity." Otologists have also suffered from the opprobrium of indiscriminate removal of tonsils. Patients have the idea that the physician operated because he found "the tonsils full of pus." There are really very few who would take the position that the mere presence of the ordinary cheesy concretions in the tonsil crypts constitutes a proper indication for tonsil removal. The tubotympanic disease so common in childhood is rarely prolonged as an active process in adult life. Unfortunately there is the very common fad for operating on the nose to relieve conditions which should be recognised as chronic progressive deafness in adults. A great deal too much has been assumed in the relationship between spheno-ethmoid conditions and optic neuritis. The author feels that sinus disease is capable of producing optic neuritis seldom "when a properly trained rhinologist with a background of clinical experience sufficient to evaluate his observations is not able to discover it," and that no exploratory operations of the sinus should be undertaken. Since Sluder's investigations many useless operations have been under-

taken on the nose for relieving headache, especially of the migraine type. There is the ethmoid enthusiast who opens ethmoids on patients complaining of headache, postnasal catarrh, eye symptoms, focal infection and nerve deafness. Otologists are urged to protect their specialty from general practitioners undertaking operative work on the nose and throat. Finger surgery of the nasopharynx, and various bizarre treatments of the Eustachian tube are the silliest of all fads, and the author speaks of this type of individual as a pest to the community.

ANGUS A. CAMPBELL.

REVIEWS OF BOOKS

Manual of the Electro-phonoïd Method of Zünd-Burguet for the Treatment of Chronic Deafness. By MACLEOD YEARSLEY, F.R.C.S., with a Foreword by Adolphe Zünd-Burguet, Doc. Univ., Paris. London: William Heinemann (Medical Books), Ltd. 1927. Price 5s.

In this book Mr Yearsley describes a comparatively recent method of treating chronic deafness.

After a foreword by Dr Zünd-Burguet, the inventor of the apparatus, the history of the method is outlined, showing that the fundamental idea of re-educating the ear or the higher brain centre of a deaf person is really a very old one revived from time to time, notably in modern times by Urbantschitsch. Zünd-Burguet points out the obvious difficulties of carrying out the treatment by the older method of using the human voice, and how the electro-phonoïd overcomes these difficulties and places the method on a practical basis.

The author gives a clear description of the apparatus, its application in practice and the theory of its action. It is the only description in the English language of the latest model.

Briefly, it is an electric apparatus, producing the tones of the human voice through $5\frac{1}{2}$ octaves. The sounds are communicated to the patient by means of telephone receivers. In addition, there is introduced what is called a molecular vibratory massage which it is claimed influences the whole of the ear mechanism and the neighbouring tissues. This appears to be a very important part of the treatment.

One gathers that all the common types of deafness may derive benefit. The results in nerve deafness and otosclerosis, usually considered beyond all aid, seem exceedingly good.

The first impression one gets on reading the book is that, in the light of previous experience of such cases, it is too good to be true! Therefore the majority of readers will probably dismiss the subject