

ABSTRACTS

EAR

Transtympanic Approach and Fenestration: The Current Technique. OTTO POPPER, Johannesburg. *Archives of Otolaryngology*, 1949, xlix, 350.

The transtympanic approach has nothing whatsoever to do with fenestration. Fenestration happens to be a procedure for which this approach is eminently suitable. The transtympanic approach is ideal for the performance of an attico-antrostomy when the mastoid process is sclerotic and the infection is confined to the attico-antrotympanic region, as an alternative procedure to the radical mastoidectomy, endaural or postaural.

The technique is described in detail and there are nineteen illustrations. After the incus has been removed during radical mastoidectomy the hearing that was present on the affected side may be gone. Such a loss will occur when the incus is removed and on examination its lenticular process is found to be undamaged by disease, and is due to the tonic contraction of the stapedius muscle. It is therefore essential to divide the stapedial tendon. If disease has involved the lenticular process, together with the capitulum of the stapes and its tendon, tonic action affecting the footplate does not arise. This may account for the remarkably good hearing frequently encountered in the presence of chronic middle ear disease with obvious osteitis and cholesteatoma.

R. B. LUMSDEN.

Interpretation of Hearing Tests. STACEY R. GUILD, Baltimore. *Archives of Otolaryngology*, 1949, xlix, 431.

The information obtained from the elaborate tests, or batteries of tests, is primarily of research interest, and until the significance of the data obtainable by these tests has been evaluated in terms of lesions that otherwise would be overlooked or in terms of therapy that otherwise would not seem indicated, clinical otologists should not be urged to use them or made to feel they are out-of-date if they do not. In other words, it is time for a clear distinction to be made between tests for research purposes and those for clinical purposes.

R. B. LUMSDEN.

Hydrodynamics and Hearing: I. The Operative Relief of Otosclerotic and Non-otosclerotic Deafness and its Relationship to Hydrodynamic Hypothesis of Hearing: a Suggested Explanation for (a) the Intimate Association of the Organs of Balance and the Organ of Hearing and for (b) the Function of the Incus. OTTO POPPER, Johannesburg. *Archives of Otolaryngology*, 1949, xlix, 335.

The writer attempts to answer the following questions:

What is meant by hydrodynamics? How does fenestration restore hearing and is such restored hearing normal? The stapes, the perilymph and the round window membrane—what is their protective role? Why are the

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organs of balance and the organ of hearing so intimately related to one another ?
Function of the ossicles : it is concluded that their separate origins should indicate separate functions, which are discussed.

When the opening at the oval window end of the system is the cause of deafness, as in otosclerosis, the fixed stapes sealing the oval window, the condition would be called *stapedial deafness* ; obstruction to sound reaching the round window region would be termed *hypotympanic deafness*, and to both of these groups must be added *irreversible deafness* when irreversible changes in the cochlear organ indicate degeneration. Hypotympanic deafness is discussed in relation to chronic suppuration and the conventional fenestration operation and the merits of the transtympanic technique are extolled. Eight illustrations.

R. B. LUMSDEN.

Acoustic, Vestibular and Other Problems Concerning Otosclerosis and its Surgical Treatment According to Popper's Method. ROBERT LUND, HARALD EWERTSEN, HELMER RASMUSSEN, NIELS RISKAER and SVEND SELSO, Copenhagen.

1. "Popper's Operation for Otosclerosis." ROBERT LUND.

2. "Acoustic Function before and after Operations for Otosclerosis."

HARALD EWERTSEN.

3. "Vestibular Function Prior to and Following Operation for Otosclerosis." Helmer Rasmussen.

4. Biochemical Conditions in Patients with Otosclerosis." NIELS RISKAER.

5. "Conditions of the External Auditory Meatus and the Tympanic Membrane in Patients with Otosclerosis." SVEND SELSO.

Archives of Otolaryngology, 1949, xlix, 380.

1. Lund's modifications of Popper's operation are described and the advantages of this operation are enumerated. He gives an interesting report of accidents which have happened with this operation. Among ninety operations carried out within the period November, 1946, to March, 1948, there were only two failures with increased impairment of hearing. The fenestra has remained open in 89 per cent. of cases. Among the patients followed up more than six months after operation 83 per cent. have an open fistula.

2. Of thirty patients operated on more than six months ago, hearing has deteriorated slightly in one, is unchanged in eight, slightly improved in two, and definitely improved in nineteen (63 per cent.). By leaving out the least fit group, twenty cases remain, of which fifteen (75 per cent.) obtained definite improvement.

3. If the fistula is still open six months after the operation, it is likely to remain so. In rotation and caloric tests some cases presented signs of a lesion of the vestibular apparatus before operation. After operation such signs were frequent. The fistula sign may be absent despite functioning of the horizontal canal, and conversely the fistula sign may be elicited despite loss of function of the horizontal canal.

4. Original investigations are reported, comprising measurements of the calcium, inorganic phosphate, phosphatase, total cholesterol, albumin and globulin in serum samples from fifty-one adult patients with otosclerosis.

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Definitely abnormal values of any of these substances could in no case be found. This result does not preclude the abnormal variations in active phases of the disease mentioned by Fowler.

5. The external auditory meatus and the tympanic membrane present no characteristics that may contribute to differentiate sclerosis from other forms of deafness.

R. B. LUMSDEN.

Otitis in Infancy with Special Reference to Mucosus Otitis, its Complications and Relationship to Other Diseases. E. URBANTSCHITSCH, Vienna. *Monatsschrift für Ohrenheilkunde*, 1949, lxxxiii, 145.

Owing to anatomical conditions peculiar to early life, the otitis of infants runs a somewhat different course from that of older children and adults. Mucosus otitis is very prevalent in the first year of life, and is of importance in that it can remain latent for a long period and fail to be recognized. Otitis is frequently associated with other diseases of infancy, in many instances being regarded as the aetiological agent. Such conditions as enteritis, nephritis, meningitis and convulsions are closely associated with middle-ear disease. A search of the literature confirms the importance of otitis as a septic focus, its latent form, and the necessity of diagnosing early, and treating promptly with myringotomy or mastoidectomy.

D. BROWN KELLY.

The Reaction of the Cochlear Potential to Oxygen Lack. H. BORNSCHEIN and F. KREJCI. *Monatsschrift für Ohrenheilkunde*, 1949, lxxxiii, 190.

In twenty-three experiments on anæsthetized guinea-pigs, the authors describe the effect of temporary anoxia on the cochlear potential. The relationship of the experimental diminution in cochlear potential to the subjective hearing loss in man due to oxygen lack is discussed.

D. BROWN KELLY.

NOSE

Nasal Fractures: an Analysis of One Hundred Cases. OSCAR J. BECKER, Chicago. *Archives of Otolaryngology*, 1948, xlvi, 344.

A series of 100 cases of recent fractures of the nose is analysed, and the management, mechanics and diagnosis are reviewed.

R. B. LUMSDEN.

Actinomyces involving Ethmoid and Maxillary Sinuses: report of a Case. ROBERT B. LEWEY and EPHRAIM L. MANNING, Chicago. *Archives of Otolaryngology*, 1949, xlix, 423.

In the light of this case and the previous experience of others, adequate treatment would seem to be in the form of a combined attack. Surgically, all abscesses should be opened and drained, and all necrotic bone should be removed. Medically, a combination of penicillin, sulfonamide drugs and thymol is desirable. Roentgen therapy should be used conjointly. The most important determining factor is early diagnosis. The patient recovered.

R. B. LUMSDEN.

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The Treatment of Chronic Sinusitis in Children. VERNON DE BOISSIERE, Montreal. *Canadian Medical Association Journal*, 1949, lx, 14.

A combination of X-radiation and Proetz displacement with penicillin 1 in 200 in physiological saline has been used in the treatment of 350 cases of chronic paranasal sinusitis in children, seventy-five cases treated by displacement only being used as controls. The principle of X-ray therapy is said to be based on the results of a mild inflammatory dose, which is reported to produce two main results: (1) Reduction of the lymphoid tissue which proliferates, and tends to impede drainage, and (2) Resolution of the existing inflammatory process. Operation was not found necessary in any of the 350 cases, and no harmful effects on the nasal mucosa had been noted in four years. The control time of individual cases is not stated, and the results are apparently assessed by the "absence of objective findings in the sinuses" in X-rays taken one month after the completion of treatment.

J. CHALMERS BALLANTYNE.

Congenital Atresia of the Naso-Lachrymal Duct. NICHOLAS W. WOYWITKA, Toronto. *Canadian Medical Association Journal*, 1948, lix, 357.

A series of cases of congenital dacryostenosis is recorded, in which the condition had occurred in four generations. Of forty-six members of the family, nine were afflicted—three males and six females. In a note on the embryology of the naso-lachrymal duct, the author states that "all the passages are at first blocked out in solid epithelium, and only canalize just before birth. The last part to open is the lower end of the nasal duct which is at times closed by a thin membrane even at birth." The history obtained in the affected individuals was of epiphora since birth, with periodic attacks of acute conjunctivitis. It was evident from the pedigree that this rare anomaly was inherited as a dominant factor.

J. CHALMERS BALLANTYNE.

ŒSOPHAGUS

Benign Stricture of the Lower Œsophagus. C. D. Keeley, London, Ontario. *Canadian Medical Association Journal*, 1948, lix, 369.

The author records a case of benign stricture of the lower end of the œsophagus with dense fibrous adhesions, which were treated surgically by a one-stage partial œsophago-gastrectomy and œsophago-gastric anastomosis. Full technical details of the operative procedure, and post-operative management are given. Regurgitation of irritating gastric secretions was considered to be the most important ætiological factor in the production of œsophagitis, as in peptic ulceration and hiatal hernia. Repeated episodes of œsophagitis might lead to progressive cicatrization of the lower œsophagus, as in the case recorded. Œsophagoscopy should always be carried out to exclude malignancy. Only cases not responding to dilatation required surgical intervention.

J. CHALMERS BALLANTYNE.

Burns and Wounds of the Œsophagus. C. WIETHE. *Monatsschrift für Ohrenheilkunde*, 1949, lxxxiii, 196.

Cicatrical stenoses of the œsophagus following lye burns are due to organization of granulation tissue in the deeper layers of the gullet wall. This granulation tissue is caused by secondary infection, and the early administration of

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penicillin in such cases will do much to inhibit its formation. Systemic bouginage is to be avoided in the early stages, as it gives the wounded parts no rest. Only the occasional passage of a bougie towards the end of the second week is advised in order to prevent complete closure. In the swallowing of corrosive fluids, it is found that the parts of the œsophagus most affected are those deficient in mucous glands and with a poor protective covering of mucus. In penetrating wounds of the gullet wall, the early administration of penicillin is a life-saving measure.

D. BROWN KELLY.

FOURTH INTERNATIONAL CONGRESS OF OTOLARYNGOLOGY

THE International Congress of Otolaryngology in London, from July 18th to July 23rd, was a great success, helped by sunny weather for the whole period of the Congress. Every member spoke highly of the organization of the Congress, and Mr. V. E. Negus, the president, and Mr. F. C. W. Capps, the general secretary, in particular, deserve to be congratulated on the result of their two years of hard work. One reason for the success of the organization was the division of labour: instead of merely one secretary assisted by a clerical staff, Mr. W. A. Mill acted as financial secretary, Mr. G. H. Bateman as academic secretary, Mr. F. C. Ormerod and Mr. C. P. Wilson as scientific secretaries, Mr. Myles L. Formby as reception secretary, and Mrs. V. E. Negus as chairman of the ladies' committee; the work of Miss Morris, secretary of the British Association of Otolaryngologists, and her clerical staff, must also be mentioned with commendation. 725 otolaryngologists from forty different countries registered, in addition to 100 scientific associates (registrars, clinical assistants, etc.) and 500 associate members (chiefly wives and daughters of members).

The registration bureau was set up at King's College, in the Strand, where most of the scientific meetings and discussions were held, and opened on Sunday, July 17th, at 2.30 p.m., continuing until the evening of Saturday, July 23rd. At the registration office were numerous voluntary helpers, and members registered in accordance with the alphabetical order of their various countries; there were tables devoted to the different aspects of the congress—one to look after the films that were being shown by members, another for the provincial visits to Oxford, Cambridge and Edinburgh, another for the ladies and their activities; the Women's Voluntary Services had a number of their members at a table to receive and deliver messages for members, to advise on restaurants and book tables, to advise on shops and shopping, to send cables and telegrams, to supply meal tickets for King's College refectory (which was open to members), and to give general information. At another table sat interpreters, to help members with language difficulties; and at others were representatives of Thomas Cook & Son to issue tickets for excursions, to cash travellers' cheques, and to give advice regarding hotel accommodation, and representatives of Keith, Prowse to give information about amusements and book theatre tickets.