

ABSTRACTS

EAR

The Relation between Hearing Loss for Specific Frequencies and the Distance at which Speech can be Identified. E. THAYER CURRY, Urbana. *Ann. Otol., Rhin. and Laryngol.*, 1949, lviii, 33.

Individual audiometer frequency values for decibel loss indicate little statistical association with the spoken speech score. The correlation for the American Medical Association percentage hearing loss indicates it is not statistically certain that there was any degree of association with the perception of speech.
E. J. GILROY GLASS.

Chorda Tympani Nerve Section and Tympanic Plexectomy: New Technique used in Cases of Deafness, Tinnitus and Vertigo. SAMUEL ROSEN, New York. *Archives of Otolaryngology*, 1949, 1, 81.

In a recent issue of the *Archives of Otolaryngology* (1948, xlvi, 428), the author reported on a new technique used in surgical fenestration of the labyrinth, consisting of avulsing the chorda tympani from its attachment to the facial nerve and laying it over the fenestra nov-ovalis as a pedicle graft. The chorda was thus interposed between the membranous labyrinth and the tympanomeatal flap. Good one-year end-results of all eight consecutive operations in which the chorda tympani nerve graft was used are reported. In certain cases of very severe tinnitus, vertigo and deafness, there has been prompt relief of symptoms after a one-stage operation combining fenestration, section of the chorda tympani and tympanic plexectomy, the technique of which is described and illustrated and the rationale discussed.

R. B. LUMSDEN.

LARYNX

Chondroma and Chondrosarcoma of the Larynx. MELVIN R. LINK, New York. *Ann. Otol., Rhin. and Laryngol.*, 1949, lviii, 70.

Cartilaginous neoplasms of the laryngeal cartilages are comparatively rare. Two cases, chondroma and chondrosarcoma, have been presented and discussed from the standpoint of site, pathology, symptoms, diagnosis and treatment. In discussion on microscopic differentiation between benign and malignant cartilaginous tumours, Lichenstein and Jaffee believe that a cartilage tumour should no longer be regarded as benign if, when viable and not heavily calcified areas are examined, it shows even in scattered fields (1) many cells with plump nuclei, (2) more than an occasional cell with two such nuclei, and especially (3) any giant cell with large single or multiple nuclei or with clumps of chromatin. The only treatment for these neoplasms is surgical excision and in general the same as that for any tumour. It is

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essential to remove every fragment of the tumour with a fairly wide margin in order to avoid recurrence. (Author's Summary.)

Rehabilitation of the Larynx in Cases of Bilateral Abductor Paralysis: Open Approach to Arytenoidectomy, with Report of the Past Four Years' Experience. DE GRAAF WOODMAN, New York. *Archives of Otolaryngology*, 1949, 1, 91.

The author's posterior open approach to arytenoidectomy is described in detail, along with its creditable quota of cases of successful results.

R. B. LUMSDEN.

ŒSOPHAGUS

Œsophageal Varices. CHARLES B. RIPSTEIN, Montreal. *Canadian Medical Association Journal*, 1949, lxi, 141.

Œsophageal varices frequently cause massive hæmorrhages and therefore constitute a very grave complication of portal hypertension. They are responsible for more than one-half of the deaths in this condition. Apart from the mechanical effects upon the vessel walls, intravascular clotting defects further increase the magnitude of the hæmatemeses—long-continued congestion of the spleen leads to increased destruction of platelets and impaired liver function causes hypoprothrombinæmia.

Two main groups of portal obstruction are now recognized—the intrahepatic, or cirrhotic, type; and the extrahepatic, or Banti's type. The distinction is important both in treatment and in prognosis. In the former group, liver damage is severe, the prognosis is poor and operative treatment carries a high mortality; in the latter, there is little or no impairment of liver function and operation appears to offer good prospect of improvement. Liver function tests should therefore be carried out in all cases of œsophageal varices before deciding upon the method of treatment to be adopted.

The author believes that "the most rational approach to the problem of œsophageal varices has been directed towards establishing communication between the portal and caval venous systems". Such communications must be extensive enough to take the dangerous load off the natural anastomoses in the œsophagus and are effected by an end-to-side anastomosis between the splenic vein and the left renal vein, after removal of the spleen. Such a procedure may divert about 60 per cent. of the portal blood-flow. Removal or obliteration of the varices—by injection of sclerosing agents, ligation of the coronary vein, or resection of the lower œsophagus—is only rational as a secondary procedure, after the portal pressure has been reduced; otherwise recurrence is almost certain. In any case, several months should be allowed to elapse after more radical surgery has been employed, for in many cases the varices slowly decrease in size and are eventually obliterated. The results of lienorenal anastomosis have been very encouraging to date, but a longer follow-up is required before this new approach can be properly evaluated.

J. CHALMERS BALLANTYNE.

Miscellaneous

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Vertebrated Magnets for Removal of Foreign Bodies from the Air and Food Passages. CHEVALIER JACKSON and CHEVALIER L. JACKSON, Philadelphia. *Ann. Otol., Rhin. and Laryngol.*, 1949, lviii, 55.

The disadvantage of magnets for the removal of foreign bodies in the past has been the poor magnetic energy of the ordinary commercial magnet. Of recent years the demand for a more powerful magnetic energy has led to the development of the alnico magnet by the General Electric Company. This magnet is composed of an alloy chiefly of aluminium, nickel, cobalt and iron, and has great permeability as well as indefinitely long retention of its magnetic powers. Using such a magnet the authors have introduced four vertebrated instruments, ranging from a straight vertebrated rod to one curving to 180 degrees, enabling the magnet to be inserted into almost any branch of the bronchial tree. They advocate only one precaution in its use—apart from avoidance of trauma—the alloy is extremely brittle, and must be handled with the greatest care; should it break, the fragments are polarized and each fragment repels. The fragments can be removed only by use of soft iron which does not polarize.

E. J. GILROY GLASS.

Tantalum in Rhinoplastic Surgery. SAMUEL L. FOX, Baltimore. *Ann. Otol., Rhin. and Laryngol.*, 1949, lviii, 40.

The history of tissue transplants and implants is briefly reviewed, and the advantages and disadvantages of the various materials are discussed. The requirements for an "ideal" implant are also stated, and it is concluded that no such ideal substance has yet been found. A brief review of the history, and of the physical and chemical properties of tantalum is presented. Its introduction into surgery is discussed, and an extensive bibliography of the literature published on the subject is presented. Seven case reports are published in which tantalum implants have been employed successfully by the author in rhinoplastic surgery. (Author's Summary.)

Mitral Stenosis Associated with Left Recurrent Nerve Paralysis. D. F. LEWIS and J. W. SCOTT, Edmonton, Alberta. *Canadian Medical Association Journal*, 1949, lx, 512.

The authors record a single case of rheumatic heart disease, with mitral stenosis and left recurrent laryngeal nerve paralysis, in which hoarseness developed insidiously without any history of respiratory infection. Radiological examination showed enlargement of the left auricle to the left and posteriorly, with accentuation of the pulmonary vascular pattern. A review of the cases reported in the literature led to the conclusion that there was a causal relationship, disputed by some authorities as an anatomical impossibility, between mitral stenosis and left recurrent laryngeal paralysis. The paralysis was thought to be due to the hypertrophied left pulmonary artery pressing upwards on the left recurrent laryngeal nerve and compressing it between the aortic arch and the ligamentum arteriosum.

J. CHALMERS BALLANTYNE.

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Anticoagulant Therapy. C. H. JAIMET, Hamilton, Ontario. *Canadian Medical Association Journal*, 1949, lxi, 10.

Heparin has been used extensively in the Army and in Hamilton General Hospital for the past eight years, dicoumarol for the past six. Neither embolism nor severe bleeding has occurred during this period. This latter danger is perhaps the greatest objection to the anticoagulants, but such a complication is due to the indiscriminate use of these drugs. Their administration must be controlled by estimations of the prothrombin time—made in this series by a modified Quick technique. Bleeding only occurs when the dose is excessive and the prothrombin time unduly prolonged. It is of interest that dicoumarol was held responsible for three cases of profuse post-operative hæmorrhage—two prostatectomies and one hysterectomy—in which therapy had been considered; but in none of these cases was dicoumarol actually given, and one wondered whether this drug was often wrongly blamed in other similar cases reported in the literature. Anticoagulants are considered essential in the treatment of venous thrombosis.

J. CHALMERS BALLANTYNE.

Postgraduate Training in Oto-laryngology. FRANCIS L. LEDERER and JOSEPH G. SCHOOLMAN, Chicago. *Archives of Otolaryngology*, 1949, l, 59.

A review of the requirements of postgraduate education in oto-laryngology and certain of the difficulties encountered in meeting the problem reveal the scope of the task ahead. To give one course is relatively simple; to give a series of courses is not too difficult; but the integration of an all-inclusive programme requires time, effort and co-operation. The co-operation which must come from the administration offices of the college and from the other departments cannot be too strongly emphasized. The medical college must recognize its responsibility to the public in providing the postgraduate training of the specialist. It can no longer create the medical practitioner and leave to him the task of finding further training where and how he can. The examining boards have determined minimum standards, and the medical colleges must meet this minimum with a formal training programme. The University of Illinois is cognizant of the broadened academic requirements. It has assisted and supported the departments that assumed the necessary task, and it looks forward to the greater place that postgraduate training is to take in the picture of medical education. The department of oto-laryngology will be happy to share the results of its efforts in the developing of programmes at other institutions, and it cordially invites criticism that it may improve its own programme. (Authors' Summary.)

Functional and Anatomic Relation of Spheno-palatine Ganglion to the Autonomic Nervous System. DAVID HIGBEE, San Diego, Calif. *Archives of Otolaryngology*, 1949, l, 45.

The anatomy of the autonomic nervous system is briefly reviewed in order to establish a logical background for statements in this paper which are contrary to prevailing opinion. The spheno-palatine ganglion has been of clinical interest for many years, chiefly because of its association with pain.

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It is wholly associated with the parasympathetic nervous system and relays vasodilator and secretory impulses from the superior salivary nucleus to the lacrimal gland and to the mucosa of the upper respiratory tract ; it has no functional relation to the fifth nerve. Nasal membranes, like all other organs of the body, are influenced by the activities of the autonomic nervous system. Observations following paralysis of the sympathetic nervous system, section of the fifth sensory root and administration of atropine suggest the following conclusions :—

(1) In the nasal mucosa, sensory impulses are conducted by the fifth cranial nerves.

(2) Vasoconstriction is the dominant effect of stimulation of the sympathetic nerve fibres. Normally, this reflex is inactive because of its high threshold for stimulation.

(3) The parasympathetic nervous system has a low threshold for stimulation. Vasodilator and secretory fibres from the spheno-palatine ganglion are continuously making adjustments to atmospheric conditions and constitutional states in an effort to maintain a normal nasal membrane. This is the function of the spheno-palatine ganglion. (Author's Summary.)