### **ABSTRACTS**

#### EAR

Deformities of the Stapes. L. Hörbst and G. Sauser. (Arch. Ohr-, u.s.w. Heilk., 1937, lxviii, 48-51).

The authors describe the malformations of a right and left stapes bones which were found accidentally in a man, aged 62, who died from peritonitis. In one stapes the two crura were united by a thin layer of bone. The other stapes had no crura at all, but a solid column of bone leading to the foot plate (see illustrations). Apparently only four cases of the latter deformity have been described in the literature.

This type of deformity is brought into line with an abnormally situated stapedial artery, a branch of the middle meningeal artery in the embryo. In the second month of embryonic development this artery can be seen to pierce the stapes bone.

J. A. KEEN.

The Exciting Cause of Influenzal Middle-ear Inflammation.
J. Hofhauser (Budapest). (Acta Oto-Laryngologica, March-April, 1937, xxv, 2.)

One may assume, with negative bacteriological findings, that the bacillus of middle-ear inflammation is the filterable influenza virus. During an influenza epidemic one must seek this virus with the appropriate equipment.

[Author's abstract.]

H. V. Forster.

Exostoses of the External Auditory Meatus as a factor predisposing to Lesions of the Tympanum. IVAN SYK (Stockholm). (Acta Oto-Laryngologica, March-April, 1937, xxv, 2.)

In connection with two cases of perforation of the tympanic membranes in diving, in both of which exostoses in the auditory canal were present, the author indicates the possibility that exostosis gives rise to the formation of the vortices, which may lead to perforations and tear away the less resistant parts of the tympanic membrane and deposit them in the cells of the middle ear and give rise to so-called primary cholesteatoma (as in one of the cases).

The ultimate cause of healing of the tympanic membranes after extensive central destructions without resulting adhesion to the wall of the tympanic cavity, or in-growth of the epidermis into the

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tympanic cavity, is sought by the author in the air-flow which must pass near the warmed wall outwards, i.e. over the edge of the perforation, while cooled air flows inwards, passing through the centre of the auditory canal and the perforation.

The presence of exostoses increases the risk of perforations as the result of diving.

[Author's abstract.]

H. V. Forster.

Auditory Nerve Section in Ménière's Disease. R. RUTHERFORD. (British Medical Journal, March 27th, 1937.)

An investigation was undertaken to determine whether an accurate estimate of the depth of the internal auditory meatus from the outer table of the skull could be made before opening the skull and, if this was achieved, to advocate the division of the eighth nerve, when indicated, through an operating endoscope, in much the same way as one would use a cystoscope in the urinary bladder, thus reducing operative trauma to a minimum.

Dr. G. M. Morant found that an accurate estimate of the depth of the internal auditory meatus could be made from an external measurement, that external measurement being the distance between the asterion and the auriculare: "Taking all measurements in millimetres, the required asterion-internal auditory meatus chord is obtained by multiplying the determined asterion-auriculare chord by 0.581 and adding 26.33. So that the equation, which can be applied to either sex and to either side, is: Asterion-internal auditory meatus=26.33 + 0.581 asterion-auriculare."

Dr. Morant has compiled complete tables for the distances required for different values of the asterion-auriculare chord, so that in practice these tables would be used and calculation would be unnecessary.

The anatomical approach is discussed. A detailed description of a suggested operation is given and a suggested cranioscope described.

R. R. SIMPSON.

The Morphological Bases of the so-called "Functional Decrease" and Stimulation Phenomena of the Vestibular and Semicircular Canal Apparatus, in Inflammatory Disease of the Labyrinth. K. WITTMAACK (Hamburg). (Acta Oto-Laryngologica, March-April, 1937, xxv, 2.)

The so-called labyrinth stimulus phenomena (nystagmus toward the affected side) and labyrinth functional decrease phenomena (nystagmus toward the opposite side) of the vestibular apparatus depend upon pressor and depressor affection of the cupula by the existing pathological process.

# Nose and Accessory Sinuses

The labyrinth stimulus phenomena are conditioned by a preponderance of the perilymphatic pressure over the endolymphatic pressure and sense-centre pressure as a consequence of a perilymphatic extravasation.

The labyrinth "functional decrease phenomena" are conditioned by an endolymphatic or endocupular hydrops with a transformation of the cupula into the state of defective continuity.

Labyrinth stimulus phenomena can appear only when the endolymphatic hydrops is preceded by a special morbid phase in the form of a perilymphatic extravasation, which may then be recognized by particular morphological changes (paradoxical hypotonia).

The provocation of the labyrinth stimulation and "functional decrease phenomena" has the same biological basis and follows the same laws as the physiological and artificial excitation process.

In the case of "creeping" development of the pathological process, despite pronounced morphological changes in the sense centres of the vestibular apparatus, neither labyrinth stimulus nor labyrinth "functional decrease phenomena" appear in the form of a nystagmus.

H. V. FORSTER.

#### NOSE AND ACCESSORY SINUSES

A new Autoplastic Method for the Alae Nasi. I. T. DOROCHENKO (Dnieper). (Acta Oto-Laryngologica, March-April, 1937, xxv, 2.)

The author gives an account of a method for the restoration of partial loss of the ala of the nose. The principle of this operation is that the skin of the inner side of the ala is stripped right down to the edge of the ala nasi, after which, by means of an incision in the proximal part of the vestibule, this flap of skin is brought down and thus serves to restore the defect in the outer skin of the nose wing. The lower edge of the flap is folded in, and the defect on the inside of the new nose wing is covered, and the wing of the nose is supported by a piece of septal cartilage with its mucous membrane still attached.

[Author's abstract.]

H. V. FORSTER.

Treatment of Hay Fever by Intra-Nasal Zinc Ionization.

LIONEL D. BAILEY and CLIVE SHIELDS. (British Medical Journal, April 17th, 1937.)

In 100 of the cases treated, 88% were of the seasonal type and 12% were of the non-seasonal variety. In only one case of seasonal vasomotor rhinorrhæa was there failure to give a considerable

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measure of relief. The only complete failures met with were in the non-seasonal cases of long standing. No other treatment was given. The technique is not described. The results obtained were:—

Complete relief of all symptoms .. 57.6% 93.6% Considerable relief .. .. 36.0% 93.6% Some improvement .. .. 5.0% No improvement .. .. 1.4%

The conclusions drawn are:—

- (1) The technique is safe, and complications are not met with.
- (2) The method gives a satisfactory result in the great majority of cases of seasonal vasomotor rhinorrhæa, and in many cases of the non-seasonal type.
- (3) The treatment frequently gives relief when other methods have failed.

It is hoped in due course to publish a "follow-up" of these cases, and to record any remote after-effects.

R. R. SIMPSON.

#### TONSIL AND PHARYNX

Isolated Localized Amyloid Disease of one Tonsil. H. CHIARI. (Monatsschrift für Ohrenheilkunde, 1937, lxxi, 666.)

A woman, aged 58, had a history of left-sided quinsy in 1911, but since then no trouble with the tonsils. Her general health had always been good.

In 1934 a large membranous patch appeared on the left tonsil. On its lateral aspect, there was a tendency to heal with loss of tissue. Medially, however, the diseased area steadily increased in size. Bacteriological examination revealed fusiform bacilli and a spirochæte, from which a diagnosis of Plaut-Vincent disease was made. The course of the affection, however, extended over several months and was uninfluenced by various therapeutic measures. During this time the tonsil enlarged until it reached the size of a plum.

In 1936, the left tonsil was excised, and histologically examined. Large areas of amyloid degeneration surrounded by giant cells were found. These areas were situated in patches of old granulation tissue.

The condition is rare. Only two similar cases were found on searching the literature.

Derek Brown Kelly.

The Mechanism of the Air Current Pressures in the Larynx in paralysis or absence of one Vocal Cord. A. TOBECK. (Arch. Ohr., u.s.w. Heilk., cxviii, 1937, 77-80.)

The movements of the vocal cords are subject to certain ærodynamic laws. The stream of air which passes the glottis not only

## Bronchus

separates the cords, but also produces the negative pressure which brings them together again. If a narrowing exists in a hollow tube any air current passes through the narrow area at an increased rate of movement. At the same time the pressure becomes less at the constricted area. This applies to the mechanical conditions in the larynx and glottis.

Although the conditions are much altered in unilateral recurrent nerve paralysis or after operative removal of one cord, the glottis still represents the region of maximum narrowing. When one cord is paralysed and the patient makes the effort to speak, this is impossible at first. Yet the force which produces closure of the glottis enters into action. Gradually the mobile cord becomes pushed farther and farther across the midline. Ultimately it comes to lie against the paralysed cord and phonation is possible once more. The same arguments are used to explain how patients gradually recover their voice after excision of one vocal cord.

J. A. KEEN.

#### **BRONCHUS**

Carcinoma of the Bronchus in a boy aged 19. J. GORDON HAILWOOD. (British Medical Journal, March 20th, 1937.)

The author has collected all the published literature on carcinoma of the bronchus in which the age incidence is given. From this collection he shows that in 210 cases the incidence was highest between the ages of 51 and 60, i.e.  $34 \cdot 4\%$ .

The case reported complained of cough, sputum, night sweats and loss of weight of three months' duration. A few crepitations at the left apex were found. The X-ray film showed a faint rounded shadow in the left apex. A fortnight after he was first seen, small secondary nodules were present on the chest and abdominal walls. Progress of the disease was rapid and the patient died six weeks after admission to hospital. No post mortem was obtained, but the diagnosis was confirmed by section of the metastatic nodules.

The main point of interest is the age of the patient. Another point of interest was the occurrence of subcutaneous metastases, which are uncommon in this form of malignant disease.

R. R. SIMPSON.

#### **MISCELLANEOUS**

Hæmatogenous Tuberculosis in the Region of the Upper Respiratory and Food Tracts. E. WESSELY. (Monatsschrift für Ohrenheilkunde, 1937, lxxi, 641.)

Until lately, it was generally believed that tuberculosis affecting the mucosa of the mouth, pharynx and larynx was due to direct

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infection from expectoration or other matter containing the tubercle bacillus.

Not infrequently, however, laryngeal tuberculosis is associated with circumscribed pulmonary lesions with no sputum. Hæmatogenous infection, apart from acute miliary tuberculosis, is now clinically recognized, and tends to affect certain localities.

In this paper, the various forms which the disease takes in the cheeks, lips, tongue, pharynx and larynx are fully described. There are several sections, and many coloured illustrations of various lesions. The results of light therapy appear to be good.

DEREK BROWN KELLY.

Another Dutch family with so-called Osler's Disease. EELCO HUIZINGA (Groningen). (Acta Oto-Laryngologica, March-April, 1937, XXV. 2.)

By way of supplement to the publications of Edel, van Gilse and Postma, a description of a further Netherland family with so-called Osler's disease is given. This family has many members and provides us with some interesting data bearing upon the problem of heredity. The early generations suffered severely from profuse nose-bleeding; in the later generations this was not so severe. One gets the impression here of a disease disappearing in this family. Arguments are adduced that it is for the present incorrect to speak, in connection with this disease, of a dominant heredity. Finally an account is given of a woman patient having this disease in an extraordinarily severe form. She died of an intercurrent disease. A considerable improvement as regards the nose-bleeding was achieved by means of radium.

[Author's abstract.]

H. V. Forster.

Causative Treatment of Diphtheria Carriers. P.G. GERLINGS (Amsterdam). (Acta Oto-Laryngologica, March-April, 1937, XXV, 2.)

Since 1929 the author has examined forty-four obstinate diphtheria carriers (average duration 2-4 months); in nearly every case pathological conditions have been found in the throat and (or) nose. Treatment of the cause was instituted (tonsillectomy, adenotomy, maxillary sinus lavage and conservative measures) and yielded favourable results.

[Author's abstract.]

H. V. FORSTER.

Nasopharyngeal Sepsis in 2,056 cases of Mental Disorder. T. C. Graves. (British Medical Journal, March 6th, 1937.)

The observations on and treatment of 2,056 cases of mental disorder—mainly certified—by three ear, nose and throat surgeons working separately during nine years, are summarized. Stress is laid on "closed nasal sepsis" in psychosis, and several case histories

## Miscellaneous

are detailed, illustrating the effect of infections in the various sinuses.

R. R. Simpson.

Treatment of Carcinoma by Inserted Radium Plaques. H. S. SOUTTAR. (British Medical Journal, May 1st, 1937.)

The importance of uniform irradiation over the whole field of treatment and the accurate knowledge of the amount of irradiation used in the treatment of carcinoma is stressed. A method is described in which small plaques made of dental wax and carrying within the wax the seeds or needles used as sources of radiation are introduced into the tissues. The needles or seeds are so arranged as to give the flattest possible field, and where it is possible to introduce two opposing plaques, these can be so arranged that the whole of the intervening tissue receives an almost uniform radiation. If introduced into suitable tissue planes the plaques are readily tolerated, and if they are removed at the end of four or five days the small wounds made for their introduction heal without difficulty. As no foreign body has been left in the tissues, additional radiation from an external source may at once be applied, should this be desired.

The method of using such plaques for application to post-cricoid carcinoma is described and illustrated and other applications are suggested.

R. R. Simpson.

An Outbreak of milk-borne Scarlet Fever and Tonsillitis in Doncaster.

R. WATSON. (British Medical Journal, June 12th, 1937.)

Summary and conclusions:—

- I. An outbreak of scarlet fever and tonsillitis due to infection of a milk supply with *Streptococcus pyogenes* Type II, and the administrative action taken to minimize the effects of the outbreak are described and discussed.
- 2. The distribution of cases shows a heavy attack rate among pre-school children, and also that adults form a larger proportion than normal of the total cases.
- 3. The primary infection of the milk appears to have been by the cow becoming infected, but on the evidence obtainable locally the possibility of direct contamination of the milk by a milker cannot be entirely disregarded.
- 4. The complications subsequent upon infection are enumerated and, from this point of view, apart from children under five years of age, hospital treatment appears to have been of doubtful value.
- 5. The only adequate method of controlling an outbreak is by stopping the milk supply or by having it efficiently pasteurized.
- 6. To avoid a sense of false security being given in the search for hæmolytic streptococci in milk, small group samples must be taken.

  R. R. Simpson.