ABSTRACTS

EAR

The Auditory Picture. P. MINK (Utrecht). (*Monatsschrift für Ohrenheilkunde*, 1938, lxxii, 603.)

According to the author's view, the molecular movement of sound is conducted by way of the drumhead and the air in the tympanic cavity to the inner ear. The lateral wall of the labyrinth is affected by this movement, which spreads out in the labyrinth capsule.

From the promontory, the sound apparently reaches the lamina spiralis ossea, the membrane of Corti and the hair cells. The latter receive all tones of the same pitch—contrary to the Helmholtz theory of the simultaneous reception of multiple tones.

Judging from the findings in lower animals, there is a centre in the recessus sphericus, which retransmits the vibrations so that they stimulate the hair cells of the macula sacculi. Similarly, there are probably two centres in the recessus ellipticus which, besides stimulating the macula utriculi, have close connection with the semi-circular canals.

Three centres therefore are concerned in the interpretation of the component parts (Teiltönen) of a sound. Together they build up a sensation of the sound's characteristics in the conscious mind, and also influence equilibrium. In this sensation lies the recognition of pitch, to which the cochlea adds the intensity of the sound and so completes the auditory picture.

DEREK BROWN KELLY.

NOSE AND ACCESSORY SINUSES

The study of bleeding Polypus of the Septum. CIRO CALABRESI. (*Archivio Italiano di Otologia*, 1938, l, 225.)

A bleeding tumour of the nose was described by Hippocrates in his "De Morbis". Many papers have been written during the past hundred years on the subject but the tumours have been described under different names.

The author records twenty-five cases of bleeding tumour of the nose, excluding malignant growths.

Eighteen of these tumours arose from the side of the septum. Of the remaining seven, one was attached to the floor of the nose and the remainder to the lateral wall of the nose.

The histology of the tumours showed that they all contained vascular elements with a varying degree of fibrous tissue. The author classifies them as follows :

1. Fibrotelangiectasis.
2. Fibroangeioma.
3. Angeiofibroma.
4. Angeioma.

There was no hereditary disposition to the occurrence of these tumours.

Of the twenty-five cases, fifteen were females and ten males. There was a greater tendency to bleed during the menstrual periods and one tumour was observed to grow rapidly at the climacteric.

There was no age at which the tumours appeared to be more common.

Removal was effected by cutting, by curetting, by the cold wire snare, by the application of the galvano-cautery and by caustics.

There is a great tendency to recurrence, even after a wide excision, which was carried through the septal cartilage to the muco-perichondrium of the opposite side.

F. C. ORMEROD.

Intracranial complications of infections of Nasal Cavities and Accessory Sinuses. C. B. COURVILLE and L. K. ROSENVOLD (Los Angeles). (*Archives of Oto-laryngology*, June, 1938, xxvii, 6.)

In a series of 15,000 autopsies there were found sixty-two cases of intracranial infectious lesions secondary to diseases of the nose and nasal sinuses. Otitis media was associated with nasal sinusitis in eleven cases and may have been the primary source of the intracranial disease. In one case syphilitic erosion of the base of the skull opened the gateway of infection and in three cases the intracranial extension was due to the erosion caused by tumour. Six cases of cavernous sinus thrombosis are noted, three of them caused by boils of the external nose. There were eighteen cases of ethmoiditis and twenty-two cases of sphenoiditis, in which the complication was meningitis in all but four cases. Extension was usually by way of the perineural sheaths in the lamina cribrosa. The writers remark, however, that extension by way of venous channels is probably more important than is commonly believed. From the frontal sinus, infection may pass by the veins of the diploe to the dural veins and even to the superior longitudinal sinus. In the present series there were fourteen cases of frontal sinusitis but only two cases of cerebral abscess of the frontal lobe. Only in four cases was maxillary sinusitis followed by intracranial complications, but when this does occur, the sinusitis has been of dental origin. The reason for this is not clear. As a rule an acute infectious lesion of the nose or sinuses is more apt to cause intracranial infection than a chronic lesion. Rhinogenic complications

are commoner in males than in females, in the proportion of four to one.

The article is illustrated by ten figures and there are ninety-four references to literature.

DOUGLAS GUTHRIE.

MISCELLANEOUS

A Comparative Clinical and Histological Investigation of the Development of Tuberculous Lesions in the Upper Respiratory and Digestive Tracts. DR. H. ESEHWEILER (Leipzig). (*Zeitschrift für Hals- Nasen- und Ohrenheilkunde,* April 1st, 1938.)

The author found that histologically the disease starts in the lymphoid deposits in the larynx, although the well-known clinical sites of predilection do not coincide with such deposits.

The range of lesions from the proliferating and healing type to the ulcerative or poor resistance type is discussed, and the author shows how clinical remissions and variations in the immunity to the organism find expression in the histological picture.

Inflammatory œdema and surface exudation are fully discussed. Œdema is found to be usually a peri-focal reaction which points to tuberculosis when seen in a biopsy. Free tuberculous exudate can be seen in the lymph capillaries and bigger lymph vessels in the larynx and is especially marked in the vestibule and efferent lymph vessels.

The development of tuberculous laryngitis is fully discussed in its various stages and it is shown that findings which were once thought to be separate entities are in reality only stages in the disease process.

Two examples show that the exudative type of lymphangitis may go on to a "cold abscess" formation, or an attempt at fibrosis may be made.

The spread was found to be longitudinal.

There were three cases in which hyperkeratosis was comparable to cholesteatoma. There was healing with "doubling" of the vocal cords.

Foci in the subglottic area rarely spread to the vestibule, which is usually diseased primarily.

Infiltration is by the lymph vessels and associated with a chronic œdema (a sort of elephantiasis) which is to be differentiated from the acute œdema due to secondary infection.

In the author's opinion clinical tuberculosis involving the cartilages always comes from the mucosa, although metastatic tubercles in the centre of ossified laryngeal cartilages may occur.

Clinically it is important to note that perichondritis does not only arise from visible ulcers but often originates from fistulae which are epithelialized on the surface. Not infrequently a perichondritis and

"osteomyelitis" occur which are not sufficiently bad to give signs and symptoms. On the other hand the author has found in several cases that œdema does not necessarily mean perichondritis.

Tuberculosis of the crico-arytenoid joints is difficult to diagnose and different forms comparable to the different types of lesion in major joints are found. Even melon-seed bodies have been demonstrated histologically, although there was no disturbance of function.

F. C. W. CAPPS.

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