

ABSTRACTS

EAR

Etiology of Otomycosis: I. Mycologic Flora of the Ear. II. Bacterial Flora of the Ear. III. Observations on Attempts to Induce Otomycosis in Rabbits. IV. Clinical Observations. LEANOR D. HALEY, Durham, N.C. *Archives of Otolaryngology*, 1950, lii, 202.

Some species of fungi and also bacteria isolated from the external auditory canal were in many instances observed to be present in both normal and pathologic ears. The prevalent species of bacteria recovered included *Staphylococcus pyogenes* var. *albus* and *aureus*, diphtheroids, *Bacillus subtilis*, *Proteus* sp. and *Escherichia coli*. *Pseudomonas aeruginosa* was recovered only from patients having a complaint of "ear trouble". There was no evidence that the species of bacteria noted to be associated with fungi in the external auditory canal influenced the incidence of fungi in the ear.

A slight amount of trauma must accompany the introduction of fungous spores into the external auditory canal of sensitized rabbits in order to bring about an allergic reaction. Data have been obtained from animal experiments indicating that rabbits sensitized to *Aspergillus niger* give an allergic type of reaction when conidia of this fungus are introduced into the ear simultaneously with traumatization. Introduction of spores of *Aspergillus niger* into ears of non-sensitized animals did not give rise to any reaction.

Of 12 patients suspected of having otomycosis, 4 had species of *Aspergillus* present in the external auditory canals. Material from the ears of 4 of 12 patients suspected of having otomycosis yielded pure cultures of *Pseudomonas aeruginosa*. These patients showed negative results when given skin tests with antigens consisting of extracts of species of *Aspergillus*, *Penicillium*, *Alternaria*, *Hormodendrum* and *Helminthosporium*. It is emphasized that negative reactions to these skin tests made on the forearm do not indicate the true allergic status of the patient. The relation between the infected area and the area tested for sensitivity is discussed and more satisfactory sites for testing are noted.

R. B. LUMSDEN.

Studies on the Qualitative Relationship of the Differential Threshold for Changes in Sound Intensity, and the Recruitment Phenomenon. F. NEUBERGER. *Monatsschrift für Ohrenheilkunde*, 1950, lxxxiv, 169.

The recruitment phenomenon is accurate only when there is normal hearing in one ear, or at least considerable difference in the hearing threshold of the two ears for identical frequencies. In bilateral deafness, recruitment may be difficult or even impossible to determine. To avoid these difficulties, methods

Nose

have been devised to obtain an indirect, monaural estimation of recruitment, using the differential threshold for changes in sound intensity.

Qualitatively the differential threshold was found to run parallel with recruitment, the expression of one being an indirect indication of the other. The difficulty of obtaining exact measurements is stressed. The average margin of error for the differential threshold is 1 per cent. although greater errors cannot be excluded sometimes. Preliminary rough measurements were found to be sufficient for a working diagnosis, the use of weak tones, just above threshold value, rendering the examination wearisome and inaccurate. In severe perception deafness, the differential threshold (often already 10 decibels over the hearing threshold) decreases in value by 8 per cent. In such cases it is not necessary to examine the differential threshold further than 40 decibels over the hearing threshold.

D. BROWN KELLY.

NOSE

Etiological Factors in Ozæna. J. UTRATA. *Monatsschrift für Ohrenheilkunde*, 1950, lxxxiv, 199.

The infection of the nasal mucosa resulting in ozæna is favoured by disturbances of the perinasal circulation, which in turn may be due to endocrine or sympathetic imbalance. In 50 per cent. of cases the disease started in puberty. The majority of patients came from peasant stock, living in dirty conditions and exposed to animal emanations. Many ozæna cases were found also in refugee camps. Dust from wooden huts, unhygienic surroundings and prolonged malnutrition are considered to be the major factors in the disease.

D. BROWN KELLY

TRACHEA AND BRONCHI

Experiences with Surgical Reconstruction of the Trachea. P. W. GEBAUER. *American Review of Tuberculosis*, 1950, lxii, 176.

A detailed description is given of four case histories in which surgical reconstruction of the trachea was undertaken for the relief of tracheal stenosis of tuberculous origin. This is a formidable procedure because of the numerous problems regarding anæsthesia and the maintenance of an adequate airway. The first two patients were practically hopeless surgical risks because of long-standing severe tracheal obstruction and debility. Both succumbed at operation before a reconstruction could be initiated. The third patient had an excellent result with respect to the trachea, but three months after operation a cyst appeared in the apex of the upper lobe of the lung. The fourth patient had a satisfactory immediate technical result, but died some three and a half days later from œdema of the lower tracheal and bronchial mucosa.

F. BOYES KORKIS.

Abstracts

Bronchoscopy in Pulmonary Tuberculosis. N. FROSTE. *Acta Tuberculosa Scandinavica*, 1950, Supplementum, xxiii, 119.

This important and very complete monograph on bronchoscopy in pulmonary tuberculosis is based on 1,001 bronchoscopic examinations carried out on 420 patients in a tuberculosis hospital. Tuberculosis of the bronchial mucous membrane was observed in 71 cases (17 per cent.), and in a further 62 cases (15 per cent.) the findings gave rise to suspicion of involvement. Bronchostenosis was suspected in 147 cases, comprising 33 per cent. of the patients examined, but was demonstrated bronchoscopically in only 79 cases. The great number of negative findings in patients with stenotic symptoms shows that the clinical symptoms are to a certain extent unreliable. Furthermore, treatment by dilatation gave no lasting results. On account of atelectasis of the lung 102 patients were sent up for bronchoscopy; in 46 cases the cause of the atelectasis could be found, 27 having tuberculosis of the bronchial mucous membrane, with or without bronchostenosis.

For examination on account of hæmorrhage of unknown cause, 18 cases were referred, a period of ten days to four months elapsing between the cessation of the hæmorrhage and the bronchoscopy. In none of the cases could the bronchoscopic examination give the cause of the hæmorrhage. The important conclusion is drawn that to be effective the bronchoscopy must be carried out during the bleeding or immediately after it has ceased, for there to be a chance of deciding its origin.

By means of bronchoscopic examination of this series of cases in a *tuberculosis hospital*, six cases of bronchial carcinoma were revealed; four cases of Schaumann's lymphogranuloma benignum were also encountered. The importance of bronchoscopy in differential diagnosis is, therefore, well shown.

Complications were: 4 cases heavily debilitated by the anæsthesia, of which one died; damage to the teeth in 2 cases; 50 cases showed bronchial irritation with increased secretion; and 10 per cent. of the cases had a pyrexia following the bronchoscopy.

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