

## ABSTRACTS

### EAR

*Spontaneous Hæmorrhage from the Carotid in Acute Middle-ear Disease.* E. URBANTSCHITSCH (Vienna). (*Monatsschrift für Ohrenheilkunde*, 1939, lxxiii, 390.)

Erosion of the internal carotid in its bony canal due to the spread of middle-ear disease is comparatively rare. Cholesteatoma and tuberculosis, both chronic affections, are responsible for most of the cases reported.

The author details the case of a woman aged 57, admitted to hospital with a discharge from the left ear of ten days' duration. A necrotic pharyngitis associated with diabetes was also present. Profuse, foul, pulsating pus was coming from a large defect in the left membrane. Mastoid tenderness was acute, and the left mastoid cells were hazy on X-ray examination.

Nineteen days after the onset of the otitis, the left mastoid was opened. All cells were diseased, especially the retro-antral and tip cells. The lateral sinus and the dura of the middle fossa were exposed. A culture of the pus revealed streptococcus hæmolyticus.

Convalescence was slow and stormy, complicated by erysipelas of the left leg.

Six weeks after the operation a sudden severe bleeding from the nose, throat and left ear occurred. It ceased spontaneously. On subsequent days minor hæmorrhages took place, but five days after the first attack, the patient was suffocated by a violent bleeding from the nose and throat.

Post mortem examination revealed an erosion of the carotid canal and of the outer knee of the internal carotid artery. Blood clots were found in the Eustachian tube, the nasal and buccal cavities, and the left ear.

The author surmises that the combination of ear disease, necrotic pharyngitis and diabetes accounted for these findings in a relatively acute case.

DEREK BROWN KELLY.

*Ototopics.* Prof. L. E. KOMENDANTOW (Leningrad). (*Jurnal ushnikh, nosovikh i gorlovikh bolesnej*) (*Journal of Otology, Rhinology and Laryngology*, Russian, 1939, xvi, 1.)

Ototopics, i.e. the capacity of localizing the source of a sound, cannot be explained by its binaural perception, but must be referred

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to the united action of the cochlea and the skin. The ability of the tactile receptors of the skin to perceive sound vibrations is proved by experiments. One of them is carried out as follows: listening to a tuning-fork through a phonendoscop, both tubes of which are of equal length, one hears the sound equally on both sides. Approximating the right palm to the fork at once intensifies the sound in the right ear. Various experiments produce the same result.

The fact that the lateralization of sounds placed in front of us is more easy than when they are behind depends on the distribution of the tactile receptors in the skin, which are more numerous on the anterior surface of the body than on the posterior one.

A. I. CEMACH.

*On Petrositis.* Prof. A. M. NATANSON (Charkow). (*Jurnal ushnikh, nosovikh i gorlovikh bolesnej*) (*Journal of Otolology, Rhinology and Laryngology*, Russian, 1939, xvi, 1.)

Clinical report on two cases of acute petrositis, one of which showed the fully developed syndrome of Gradenigo, whilst in the other one the abducens-paresis was wanting. In both cases the pus spontaneously pierced the lateral pharyngeal wall and discharged into the mouth, twenty-two and nine days respectively after unsuccessful mastoid operations. The patients recovered.

A. I. CEMACH.

*On the Pathogenetic Structure of Otosclerosis.* Prof. A. M. GESHELIN (Odessa). (*Jurnal ushnikh, nosovikh i gorlovikh bolesnej*) (*Journal of Otolology, Rhinology and Laryngology*, Russian, 1939, xvi, 1.)

Basing his observation on thirty-five cases of otosclerosis the author emphatically denies any pathogenetic connection between otosclerosis and the endocrine system. (Compare MAREJEW, abstract in this Journal, November 1939, p. 686.)

A. I. CEMACH.

*Hormonal Deafness.* PREDESCU-RION. (*Revue de Laryngologie, Otolologie, Rhinologie*, June 1939, 6.)

The author gives the records of twelve cases of deafness, including cases of otosclerosis, nerve and catarrhal deafness. Some were influenced favourably by treatment with ductless gland extracts, mainly parathyroid, but in certain cases by ovarian and multi-glandular extracts.

Summarizing the results obtained, the author considers that deafness is a clinical entity, due to a number of factors, many of which are at present not fully understood. He points out that in the cases recorded, administration of parathyroid extract produced

## Nose

improvement in different types of deafness and that the blood calcium, whether high or low, was influenced by the same treatment. He feels that further research into the relationship between liver function, the ductless glands and the vitamins, offer hope in the treatment of chronic deafness.

### NOSE

*Atrophic Rhinitis: Treatment with Estrogenic Substances*  
W. W. EAGLE, R. D. BAKER, and E. C. HAMBLIN. (*Archives of Otolaryngology*, xxx, 3, 319-33.)

After reviewing the older literature on the relationship between the nose and the genital tract, the writers describe some experimental work on animals which led Mortimer, Collip and others to test the effect of crystalline oestrogens in the treatment of atrophic rhinitis. The present study concerns twenty-two cases of atrophic rhinitis; all but one were definitely benefited. Treatment consisted in nasal irrigation twice a day with 1 in 10,000 potassium permanganate, followed by spraying each nasal cavity with  $\frac{1}{2}$  c.c. of oestrogenic substance (1,000 units per c.c.).

The oestrogens employed were amniotin in corn oil and progynon DH in sesame oil.

In fourteen of the cases the nasal mucosa was examined before and after treatment by a biopsy specimen from the middle turbinate but no very definite changes were observed, though increase of mucous glands and more mucous cells were noted in several cases.

The paper is illustrated by eight micro-photographs.

DOUGLAS GUTHRIE.

*Oro-Antral Openings and their Surgical Correction.* A. BERGER.  
(*Archives of Otolaryngology*, xxx, iii, 400-10.)

Oro-antral fistula may be caused by removal of teeth, by cysts, infections or neoplasms, or by traumatic injury.

Many of these openings, especially when due to dental extraction, close spontaneously. The fistula should not be closed until it is certain that no foreign body, usually a tooth or root, is present. Maxillary sinus suppuration must also be excluded. The best procedure for closing the fistula consists in the use of a sliding flap of buccal mucosa. It is cut by divergent incisions which, at the edges, are carried down to the bone. The flap is retained over the opening by mattress sutures. The palatal tissues remain intact.

The paper is illustrated by five figures, the last of which shows very clearly the steps of the operation.

DOUGLAS GUTHRIE.

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## TRACHEA

*Carcinoma of the Trachea.* A. M. OLSEN. (*Archives of Otolaryngology*, xxx, iv, 615-30.)

Sixteen patients with carcinoma of the trachea encountered at the Mayo Clinic from 1921 to 1937 are reported on, and the literature on primary carcinoma of the trachea is reviewed. An attempt is made to correlate the pathologic, clinical and therapeutic aspects of this condition. The following points are emphasized :

1. The diagnosis of tracheal carcinoma is made most readily by means of bronchoscopic examination. This procedure should be carried out in any instance in which obstruction of the upper air passages is not explained or in which there is no obvious reason for hoarseness of the patient or paralysis of the vocal cords.

2. Specimens for biopsy should be taken from the tumour. It is important to determine whether the carcinoma is of glandular or squamous cell type. The degree of malignancy of the tumour should be estimated. Of the fifteen cases examined, nine were adeno-carcinoma and six were squamous celled carcinoma.

3. The relative malignancy of a carcinoma may be ascertained by grading the tumour according to the method of Broders. The classification of carcinomas into four grades is made on the basis of the ratio of differentiated to undifferentiated cells.

4. Although the prognosis for carcinoma of the trachea is admittedly poor, there are occasions when accessible tumours of the glandular cell type of a low grade of malignancy are amenable to treatment.

5. Local removal and cauterization with surgical diathermy appear to be the most efficacious methods of treatment. These procedures may be carried out through the bronchoscope or through a tracheotomy wound.

6. Surgical resection of the trachea is the treatment of choice when tumours of the squamous cell type or of a high grade of malignancy are encountered. Treatment with roentgen rays or implantation of radon seeds may be of definite value.

Seven patients of the sixteen in the present series are still alive, at periods varying from nine months to nine and a half years after treatment.

A comprehensive bibliography of thirty-seven references is given.

DOUGLAS GUTHRIE.

## MISCELLANEOUS

*Tonsillectomy and Nephritis in Childhood.* R. S. ILLINGWORTH. (*Lancet*, 1939, ii, 1013.)

The author, from an analysis of 301 children admitted to the Hospital for Sick Children in the last eleven years for acute nephritis,

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draws certain grave conclusions as to the wisdom of tonsillectomy ; 20·2 per cent. of these children had had tonsillectomy some months or years previously. From figures showing the incidence of tonsillectomy in London children, only 9 per cent. of children admitted for the disease might be expected to have had the operation. It is suggested that the operation may, in fact, predispose to the occurrence of nephritis. In fifteen (5 per cent.) of those admitted for acute nephritis in eleven years tonsillectomy is considered the probable cause of the disease. The nephritis was not mild. All of the four cases seen later still showed evidence of active disease four to eleven years after the onset. Tonsillectomy was performed in 119 cases in the acute phase of the disease without beneficial effect on the urinary condition. Of these 84 per cent. were discharged with abnormal urine after an average stay in hospital of thirty-six days between operation and discharge ; and 86 per cent. of patients not operated upon were discharged with abnormal urine. Tonsillectomy did not prevent exacerbations some months later nor check the activity of the nephritis. Of fourteen seen in hospital in the subacute stage some years after the onset of the nephritis eight had had tonsils removed during the acute stage. Re-examination of children one to twelve years after the onset suggested that those who had had tonsils removed had fared no better than those whose tonsils were still intact : twenty-three out of thirty-four of those in whom the operation was performed in the acute stage, fifteen out of twenty-one of those in whom it was done before the onset of nephritis, twenty out of twenty-seven with tonsils intact, and four out of four of those cases of nephritis caused by the operation still showed evidence of activity. The final conclusion reached is that tonsillectomy does not prevent nephritis but may predispose to it ; does not cure nephritis nor prevent it from progressing to the chronic stage ; and tonsillectomy may cause nephritis.

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