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recovery apart from the restriction in the fields of vision (taken by Sir William Lister, *December*, 1923). Fortunately the macula escaped, and through successful adaptation, he has carried on his profession without interruption.

The only drawback—to which he has long resigned himself—is that he is denied the pleasure of driving a car, because when looking straight ahead, he sees nothing on the right-hand side of the road.

[Fuller notes of this case are contained in a paper read before the Section of Otology, March, 1934 (*Proceedings*, xxvii, 1,677). See also *Journ. Laryng. and Otol.*, 1, 120.]

ABSTRACTS

EAR

On the relations between the perilymph and endolymph circulations under abnormal conditions. M. OHMA. (*Hals- u.s.w. Arzt*, March 1939, xxx, 73-87.)

The author describes a small group of five cases which illustrate a condition of obstruction in the aqueductus cochleae. A common finding in such cases is a dilated spiral vein, presumably in order to help in the absorption of the perilymph. Reissner's membrane may show some evidence of collapse. As a contrast, three cases are described where there was an obstruction to the endolymph outflow. The epithelium of the saccus endolymphaticus is said to have the function of absorbing endolymph. When the ductus endolymphaticus is blocked by the apposition of bone, e.g. in fractured base, the ductus cochlearis tends to dilate with a bulging of Reissner's membrane.

These various conditions are illustrated by microphotographs. The author's main conclusions are as follows: The perilymph originates in the labyrinth and its outflow is normally by the aqueductus cochleae. The endolymph also arises in the labyrinth and is absorbed by the epithelium of the saccus endolymphaticus. A special "valve" exists which enables the endolymph pressure in the semicircular canals and utricle to be maintained independently of the pressure in the saccule and ductus cochlearis.

J. A. KEEN.

The width of the Basilar Membrane in Man.
ERNEST GLEN WEVER, Ph.D. (Princeton, N.J.). (*Annals of O.R.L.*, 1938, xlvii, 37.)

The width of the basilar membrane was measured in 25 human cochleas at a number of positions from base to apex. By the

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graphic reconstruction method, these positions were determined for each cochlea in terms of the distance from the basal end.

The measurements for the different ears were in good agreement in the basal part of the cochlea, but showed wide variations in the apical part. Most of the basilar membranes, and particularly those of more than average length, attained a maximum width at a point about a half-turn before the apical end, and then decreased rapidly.

The average value of the maximum points measured was 498 micra, which is about six and one-fourth times the minimum width of 80 micra as measured in a special series of sections.

No significant relation was found between the form of the basilar membrane and age, sex, or race, of the condition of hearing as shown by audiometer tests made before death.

It is pointed out that a theory of hearing that postulates a differentiating role for the width of the basilar membrane must allow for a wide range of normal variation in the apical region.

[Author's summary.]

GILROY GLASS.

The Inner Ear from an experimental and clinical standpoint.

WALTER HUGHSON, M.D. (Abington, Pa.). (*Annals of O.R.L.*, 1938, xlvii, 69.)

However much one might hope for help in this particular discussion from experimental findings, at the present time little of concrete value from the clinical standpoint is available. The resonance theory and localization is of minor importance. Auditory fatigue, and inner ear phenomenon, the division of bone conduction findings into conductive and neural elements, intralabyrinthine pressure changes, are the sole contributions of practical interest so far as clinical tensities of sound, the effect of drugs have added little to observations already made in the course of careful routine clinical examinations. The entire subject of toxic neuritis of the cochlear division of the auditory nerve is definitely a matter of great uncertainty. Many factors undoubtedly contribute to impairment of function of this particular cranial nerve and to the neural mechanism of its end organ. The known microscopic pathology of deafness is a matter of relatively gross change. The situation of the end organ in its unique bony encasement restricts, a priori, the finer histological techniques involved in any demonstration of slight cellular and nuclear changes. Clinical diagnosis must be the final resort and having arrived at that, the accuracy of the study must be gauged by the success of the therapeutic measures employed. Organic change or destruction should be as obvious as it is irremediable. When such a change cannot be demonstrated beyond any

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reasonable doubt the situation challenges every resource of the otologist's diagnostic acumen.

CONCLUSIONS

1. Impaired bone conduction is not necessarily an indication of atrophy of the nerve or organ of Corti.
2. Loudness, balances and fatigue tests are valuable adjuncts in differentiating between nerve and conductive deafness.
3. Toxic neuritis of the cochlear division of the VIIIth nerve undoubtedly plays an important rôle in the development of certain cases of deafness.
4. Accurate determination of the etiological factor is usually possible and appropriate therapy will arrest the progress of the impairment and in many instances bring about improvement.

[Discussion and Conclusions by the Author.]

E. T. GILROY GLASS.

Conservative treatment of unperforated acute Otitis Media.

K. MÜNDNICH and H. WÖHL (Prague). (*Münchener Medizinische Wochenschrift*. December 2nd, 1938, 1,862.)

This is a discussion on the results of the treatment of acute otitis media in 150 cases, myringotomy being performed in only 11 cases and 22 perforated spontaneously. But only 38 cases had a bulging drum. The author draws no definite conclusions from the discussion but does not disclose any contra-indication to myringotomy. Incidentally it is interesting to note that the situation in Prague is much the same as in many hospitals in England for in the Ear, Nose and Throat Department they deal with 15,000 new cases a year and have only 40 beds.

G. H. BATEMAN.

Chronic middle-ear suppuration and vitamin C. Experimental investigations on vitamin C and the Middle-ear Mucosa.

F. CHIMANI (Vienna). (*Monatsschrift für Ohrenheilkunde*, 1939, lxxiii, 123.)

Eighteen cases of chronic middle-ear suppuration were given large doses of vitamin C in addition to conservative local treatment. Most of these patients showed a considerable deficiency in this vitamin. In ten instances, the suppurative process ceased, the ear becoming dry. An improvement of the otoscopic picture and a lessening of the discharge was observed in the remainder.

Temporal bones from guinea pigs, one of which died from C-avitaminosis, another which was normally fed, and a third which had received 1,800 mg. of Redoxon subcutaneously were examined microscopically. Specimens of mucosa from the nose,

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mouth and middle-ear were stained and sectioned. In the case of the satiated animal, a definite reaction was observed in the middle-ear mucosa, which appears to store up the vitamin.

It seems that in middle-ear disease as in other chronic infection a vitamin C deficiency is present, treatment of which has a beneficial effect on the suppurative process.

The article is well illustrated with micro-photographs.

DEREK BROWN KELLY.

LARYNX

Laryngeal Polypi. M. LALLEMANT, J. DELARUE and J. LEROUX-ROBERT. (*Les Annales D'Oto-Laryngologie*, January 1939.)

The following conclusions can be arrived at from this paper :

1. The term "laryngeal polyp" is a well-defined clinical and histological entity.

2. A clear distinction should be drawn between laryngeal polypi and those tumours which are known as lipomata, adenomata, myxomata, chondromata, etc., with which they are frequently confused.

3. Laryngeal polypi are not "tumours". They are inflammatory in nature. They are the expression of local inflammation of the sub-mucous chorion. There are often degenerative changes which may regress or become organized.

4. Laryngeal polypi are similar histologically to Singers' Nodules and to certain tumours—so called "amyloid"—of the respiratory tract.

M. VLASTO.

The Surgical Treatment of Carcinoma of the Larynx. GORDON B. NEW, M.D., F.A.C.S. (Rochester, Minn.). (*Surgery Gynaecology and Obstetrics*, lxxviii, 2a, 462, February 15th.)

Surgical treatment has given the best results in carcinoma of the larynx. The surgeon must be prepared to employ other methods in certain cases.

The author finds suspension laryngoscopy of great value in diagnosing difficult cases. Binocular vision is obtained and an accurate biopsy can be performed.

In selecting treatment, the length of history, location and extent of the tumour, histological grade, presence of metastases and the age and general condition of the patient must all be considered.

Carcinoma of the larynx is divided into three groups: (1) supraglottic growths, (2) intralaryngeal and subglottic growths,

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(3) laryngopharyngeal growths arising in the pyriform sinus or postcricoid region.

The histological grade of the tumour is of great importance. A much wider excision must be performed in the more active growths.

Supraglottic growths.—Tumours of the epiglottis can often be removed perorally with surgical diathermy and suspension laryngoscopy. When the aryepiglottic fold is involved pharyngotomy through the thyrohyoid membrane or lateral pharyngotomy is indicated.

Intralaryngeal growths.—Thyrotomy is the method of choice in favourable cases, the growth being removed with surgical diathermy. Sometimes it is advisable to do an exploratory thyrotomy before deciding on a laryngectomy. Laryngectomy is indicated in the more extensive growths and the author's technique is described. Paravertebral anaesthesia is employed.

Laryngopharyngeal growths.—Irradiation is usually the treatment of choice in these cases. If the tumour is of low grade malignancy and the cervical lymph nodes are not involved Trotter's transthyroid pharyngotomy is indicated. These growths are usually highly malignant and metastasise early; surgical intervention is seldom possible.

Although Quick stated that irradiation had rendered laryngectomy obsolete he did not produce convincing evidence.

The operative mortality of total laryngectomy is less than 3 per cent. and between 50 and 60 per cent. of patients are alive five years later.

W. H. BRADBEER.

TRACHEA

Leeches in the Trachea. DR. DOBREW (Sofia). (*Münchener Medizinische Wochenschrift*, 1939, 6, 225.)

Since the report by Dr. Melikian in the *Münchener Medizinische Wochenschrift*, 1938, No. 47, of a leech in the larynx there has been another leech in the larynx reported by Dr. Carl Radmann in December 1938, No. 52. This prompted Dr. Dobrew to review the subject and give references to other reports.

G. H. BATEMAN.

MISCELLANEOUS

Pathology and Therapy of Intermittent Swelling of the Parotid. S. ROSENAK (Budapest). (*Monatsschrift für Ohrenheilkunde*, 1939, lxxiii, 153.)

Five cases in which the parotid gland became intermittently and acutely swollen are described. The condition appears to be

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associated with an ulcerative inflammation of the buccal mucous membrane. It appears that the inflammatory process extends inwards from the mouth of Stenson's duct without the duct itself taking part in the inflammation. A muscular contraction of the duct due to the papillitis results in a damming back of secretion in the gland.

In two cases the passing of a probe along the duct relieved the condition. The remaining three were treated by the removal of the inflamed papilla at the duct mouth. All healed well without further trouble.

If the condition remains untreated, the damming back of saliva causes a chronic inflammation of the duct and also of the gland itself, resulting in permanent damage to the gland parenchyma.

DEREK BROWN KELLY.

Remarks on the correct procedure to adopt in cases where a foreign body is lodged in the Digestive Tract. A. ALIVISATOS and G. GOUFAS (Athens). (*Les Annales D'Oto-laryngologie*, January 1939.)

A single case is quoted of a baby of 15 months who swallowed a toy metallic ring which passed out four days later with purgatives and diet as the only treatment. On the basis of this case, apparently, the authors conclude as follows :

1. That in cases where a foreign body lodges in the stomach and where radiographically there is no evidence of alteration in position it should be removed by gastrostomy after a period of 10 days.

2. In cases in which a foreign body in the stomach gives rise to alarming symptoms and shows no tendency (radiographically) to pass on : immediate gastrostomy should be carried out.

3. In cases in which a foreign body is static in the intestine for a period of 5 days : enterostomy should be performed.

4. In cases where a foreign body is lodged in the intestine and causes acute symptoms : immediate enterostomy should be performed.

M. VLASTO.