

Ear

marked and continued spontaneous nystagmus, horizontal, on deviating eyes to right and left; no adiadokokinesia. With caloric and turning tests, no vertigo; no past-pointing. Cold caloric in each ear aggravated spontaneous nystagmus, especially on putting head back after douching right ear, but the response was slight from left ear, and only after douching about two minutes turning seemed to aggravate the spontaneous nystagmus.

Mr Pringle, on 16th November, did a decompression operation, and a week later removed tumour from left cerebello-pontine angle.

Fracture of the Thyroid Cartilage—Dr GAVIN YOUNG.—A male, fourteen days previously, fell from a scaffold six feet high, and struck the front of his neck. Hoarseness and pain supervened, with swelling and crepitus over the left ala of the thyroid cartilage. Laryngoscopy revealed an appearance suggesting prolapse of the left ventricle; the movement of the L.V.C. was unimpaired. X-rays confirmed the diagnosis of fracture.

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Changes in the Temporal Bone, as the Result of Experimentally induced Rickets, and their Relation to Otosclerosis. ARNOLD KAUFFMANN, Chicago. (*Monats. für Ohrenheilk.*, Year 57, Vol. x.)

This report is based on the result of experiments with young white rats kept on varying diets for three months, after which time they were killed, and a detailed histological examination carried out.

The report gives a full account of the microscopical appearance of the bony changes associated with the cochlear apparatus and of those occurring in the soft parts, along with a short historical survey of the work of various writers on the subject of otosclerosis.

The author's opinion is summarised as follows:—

1. Young rats which have been kept on a diet deficient in fats, vitamine A, and calcium show changes in the bony capsule of the inner ear, which are identical with the changes found in the long bones as the result of experimentally induced rickets.
2. Since these changes affect structures, which are intimately associated with the function of hearing, this function is impaired.

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3. The changes which occur in the temporal bone, as the result of experimentally induced rickets, and those described in cases of otosclerosis are so similar, that otosclerosis may be regarded as either a late sequel of rickets, or as the expression of a diet deficient in vitamine A occurring in later life.
ALEX. R. TWEEDIE.

A Case of Unusual Hæmorrhage following a Mastoid Operation.

H. LAWSON WHALE. (*Lancet*, xi., 1923, 930.)

The author describes the remarkable case of a man, aged 23. There was no excessive hæmorrhage during the operation, but on the four evenings following, the cavity repeatedly filled with blood. On the third recurrence, deep under-running sutures were used. Injections of hæmoplastin, rectal salines, and calcium lactate by mouth were all useless. Finally, as the patient's condition became grave, the external carotid was tied. Recovery was then slow but uneventful.

MACLEOD YEARSLEY.

Primary Thrombosis of the Mastoid Emissary Vein with Secondary Involvement of the Lateral Sinus. (*The Laryngoscope*, Vol. xxxiii., No. 5, p. 347.)

A child, aged 10, suffering from acute otitis in the right ear, for which a paracentesis was done, developed, on the sixth day of the illness, œdema over the region of the mastoid vein. Two days later, the temperature commenced to swing. X-ray showed an acute mastoiditis, and a mastoid operation was done on the fourteenth day of the illness. This revealed a pneumatic mastoid, pus and granulations; a streptococcus was obtained by culture. The lateral sinus was uncovered and found to be normal. The mastoid emissary was unusually large, being $\frac{3}{8}$ of an inch in diameter, and could be traced to the lateral sinus. It was discoloured, black and thrombosed, but the disease seemed to stop short of the lateral sinus. The emissary was not disturbed, the wound was packed with iodoform and left open. The condition of the patient did not improve, and in a week the jugular vein was ligated in the neck, where it appeared to be normal. The mastoid emissary came away in one mass, and no bleeding occurred, but on incising the lateral sinus no thrombus was detected, and free bleeding from the torcular and bulbar ends took place. The child quickly improved, and was discharged six weeks later as cured. The authors are of opinion that the sepsis originated in the emissary vein.

ANDREW CAMPBELL.

Pharynx

Cases of Otogenous Brain Abscess following Healed Otitis Media.

PAUL HENIUS. (*Acta-Laryngologica*, Vol. v., fasc. 3.)

Several cases of inflammation of the middle ear have been reported in which healing has occurred and the perforation closed, and yet, weeks or months later, there has developed a brain abscess which has been proved, by operation or at an autopsy, to be certainly of otitic origin. In such a case both the hearing and the appearance of the tympanic membrane may be completely normal, and if the observer were unaware that there had been a recent attack of ear trouble, he might take a completely false view of the patient's condition. The author describes three cases of this kind observed in Professor Schmiegelow's Clinic in Copenhagen, and gives brief notes of seventeen others from the literature. In all of these twenty cases healing of the middle ear disease was apparently complete before the symptoms of brain abscess developed. In eighteen, the disease was acute and in two chronic; in two of the former there had never been a perforation of the drum. The abscess was cerebellar in six and cerebral in fourteen. Fifteen of the twenty cases ended fatally and were examined post-mortem.

THOMAS GUTHRIE.

THE PHARYNX.

The Incidence and Histopathology of Bone and Cartilage in the Tonsil.

CARL VERNON WELLER, M.S., M.D. (*Annals of Otology, Rhinology, and Laryngology*, Vol. xxxii., September 1923, No. 3.)

The author bases his report on the histological examination of a consecutive series of 1000 tonsils. Cartilage and bone are found only in the connective tissue structures of the tonsil, the capsule, and the trabeculæ. They are never met with in the substance of the lymphadenoid tissue.

The following conclusions are drawn:—

- (1) In 1000 tonsils examined, the incidence of cartilage and bone was found to be 20.9 per cent.
- (2) Bone was never found without at least some cartilage, and occurred in 28.3 per cent. of the 209 cases in which cartilage was found.
- (3) The incidence was not significantly affected by a segregation of the cases as to sex.
- (4) The average age of cases showing cartilage or bone was 24.2 years; of those which were negative, 17.2 years.
- (5) The incidence of cartilage and bone remains at a nearly constant level up to puberty. It then rises rapidly to a high level at age period 26 to 30, after which it appears

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to remain practically constant. The period of most rapid increase in incidence is thus coincident with the period of most active osteogenesis in the skeleton development of the individual, and is, therefore, apparently subject to the same laws as those governing general bone development.

- (6) Cartilage and bone are found only in the connective tissue structures of the tonsil, where they occur in two somewhat distinct types.
- (7) In one type, the microscopic sections show a single mass of cartilage in close association with a mucous gland. We have not observed bone formation in this type. It is possible that the occurrence of cartilage in this situation is within the range of anatomical variation and has no pathological significance.
- (8) In the other type, multiple foci of cartilage and bone occur throughout the capsule and trabeculæ, usually associated with considerable increase in connective tissue.
- (9) Cartilage is formed by a process of progressive transformation (direct metaplasia) of the connective tissue, while bone in the tonsil always arises in such newly formed cartilage by processes wholly comparable to endochondrial ossification elsewhere.
- (10) Disturbance of development in the sense of "rests" of cartilage and bone cells cannot explain the occurrence of these tissues in the tonsil.
- (11) The inherent predisposition of the connective tissue of the tonsil to form cartilage depends upon its origin from branchial arch structures. This latent tendency becomes especially effective under the influence of chronic inflammation.

F. HOLT DIGGLE.

Additional Notes on the Immunising Function of the Subepithelial Lymphatic Glands. KENELM DIGBY. (*Lancet*, Vol. xi., p. 1077, 1923.)

The author continues his series of papers published from 1911-17 in *Guy's Hosp. Gaz.*, *Lancet*, *Univ. Med. Rec.*, and *China Med. Journ.*, in which he suggested the grouping together of the tonsils, Peyer's patches, solitary lymph glands, and vermiform appendix as "subepithelial lymphatic glands." These are continually ingesting the adjacent bacteria in the nasal and alimentary canals by a process which he named "phagotaxis." In this paper is discussed the immunising function of the tonsil, a theory of which the writer is a strong partisan. This view, he thinks, is unpopular, because some surgeons look upon it as a reflection upon their work in removing

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tonsils. "To admit that an organ has a useful function, however, does not imply that it should never be removed when it is the site of disease."
MACLEOD YEARSLEY.

A Comparative Study of the Crypt Contents of Tonsils of Man, Pig, and Cow, with special reference to the Actinomyces Granule.
G. D. J. DAVIS, M.D., Chicago. (*Journ. Amer. Med. Assoc.*, Vol. lxxxi., No. 14, 6th October 1923.)

In about 30 per cent. of extirpated tonsils actinomyces-like granules are found. They probably appear at times in the crypts of all tonsils. Their ray character causes them to be often mistaken for true actinomyces, but their structure is different and easily determined. True actinomyces of the human tonsil is very rare.

In an examination of a large number of tonsils from hogs the similarity in microscopic structure to the human tonsil is noted. In the gross specimen it was common to see plant fibres projecting from the crypt lumen. These fibres usually consisted of straw or grass, and actinomyces granules were very commonly found in close apposition or growing along their margin. In five hundred tonsils examined, 7 per cent. contained embedded straw and 4.7 per cent. showed actinomyces. Caseous or purulent plugs were found in 30 per cent., but these masses did not show actinomyces granules.

Eighty-six tonsils from cows were examined, and in only three were pieces of vegetable fibre found. Small greyish, cheesy, or purulent plugs were seen in practically every tonsil, and not infrequently small excapulated abscesses. In no case were any actinomyces granules found.

Granules of the human type are not found in the hog, but spirochetes and fusiform bacilli are present, but not so constant as in the human gland. In the cow neither the human nor hog type of granules is found and spirochetes are absent.

PERRY GOLDSMITH.

A Case of a Large Pharyngeal Diverticulum cured by Operation in two Stages. IVOR BLACK and LIONEL COLLEDGE (*Lancet*, Vol. xi., p. 1237, 1923.)

The authors record this case in a cabman, aged 54. Cases of this nature are less rare than was formerly supposed. The pouch was large enough to hold nearly a pint and a half. The danger of the earlier operations was commonly leakage and risk from consequent mediastinitis. In this case excision of the pouch secured a radical cure and reduced the risk of mediastinitis, because the sac was not opened until its neck was firmly adherent to the cervical fascia. The use of the oesophagoscope is unnecessary and dangerous.

MACLEOD YEARSLEY.

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Carcinosarcoma of the Hypopharynx. F. J. LANG and W. KRANZ, Innsbrück. (*Zeitschrift für Hals-, Nasen-, und Ohrenheilkunde*, Sept. 1923.)

In this pathological study of two cases, the authors make out that, in one, the primary condition was a carcinoma, and that the horny pearl-nests acted as excitants for the supervention of sarcoma. In the second, sarcoma seemed to be the primary condition, and the epithelial cells of the mucous membrane were stimulated by this to blastomatous growth. The chronology was established by the great amount of cornification of epithelial cells in the first and the comparative absence of it in the second. In the latter, the greater age of the sarcoma was evidenced by the extent of hyaline degeneration of the sarcoma cells. The article is mainly of pathological interest, and is illustrated by a number of very convincing micro-photographs.

JAMES DUNDAS-GRANT.

An Unusual Incident following Tonsillectomy. ALFRED A. LENDON and R. H. PULLEINE. (*Medical Journal of Australia*, 10th November 1923.)

A girl, aged 7 years, had her tonsils removed with the Mackenzie guillotine under chloroform followed by ether. The left tonsil slipped out of view, and evidently lodged in the right bronchus, as on recovery from the anæsthetic she was cyanosed, the right side of the chest was hardly moving at all, and the breath sounds were weak.

Ten hours later she was violently sick, and the tonsil was ejected. Next morning all abnormal physical signs in the chest were absent.

A. J. BRADY.

LARYNX

Discussion on Spasm of the Larynx at British Medical Association Annual Meeting at Portsmouth, July 1923. (*Brit. Med. Journ.*, 20th October 1923.)

Sir St Clair Thomson, opening the discussion, pointed out that having consideration to the anatomical form of the larynx, the title was a misnomer—that “Spasm of the Glottis” was more correct. He defined the causes of glottic spasm as:—

- (1) Local irritation.
- (2) Irritation of the motor nerves.
- (3) Central nerve lesions.
- (4) Hysterical or functional disorders.

He said that in the majority of everyday cases, spasm of the glottis is a reflex phenomenon concerned with increased or diminished sensation

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in the pharynx or larynx. He enumerated the various conditions giving rise to anaesthesia and hyperaesthesia of the larynx. Under (2) he includes "any lesion which irritates the recurrent laryngeal nerve in the neck or on the left side of the mediastinum." In group (3) locomotor ataxy is the most common causal factor. The attack of spasm ends (1) by resolution, (2) by death from asphyxia, or (3) by death from cardiac syncope. Relief may not be immediate and complete—a slightly stridorous cough may remain.

In putting the question, "When is glottic spasm not a spasm?" the distinction is emphasised between spasm of the adductor muscles and failure of the abductors. This important part of the paper it is impossible to summarise—it must be studied *in extenso*—a remark which, indeed, applies to the whole paper.

Sir James Dundas-Grant dealt with laryngismus stridulus which occurs almost exclusively in rickets, and distinguished this from laryngitis stridulosa, the condition usually spoken of as croup. The former is due to deficiency of calcium, with consequent hyper-excitability of the nerve centres. Laryngeal vertigo he preferred to speak of as laryngeal syncope, it being due to an accession of blood to the chest consequent on spasm of the glottis, with a corresponding anaemia of the brain.

Dr W. H. Kelson suggested the use of the term "constrictor" instead of "adductor" since the opposing terms generally in use are so much alike, both vocally and in print, as to be confusing. He pointed out that the constrictor muscles are so much stronger in action than their opponents that the tendency of any nerve-irritation, whether direct or reflex, is to cause closure. Moreover, the excitability of the reflex mechanism being much more marked in children, attacks are more easily produced in them, especially at night when the higher controlling cerebro-cortical centres are in abeyance. He said the "congenital laryngeal stridor" which used to be described as due to spasm, was proved by Lack and Sutherland to be caused by flaccidity of the epiglottis and aryepiglottic folds, a developmental deficiency which gradually disappeared as time went on.

T. RITCHIE RODGER.

ŒSOPHAGUS

Congenital Strictures of the Œsophagus. PORTER P. VINSON, M.D.,
Rochester, Minn. (*Journ. Amer. Med. Assoc.*, Vol. lxxx., No. 23,
9th June 1923.)

Four cases of congenital stricture of the œsophagus from the Mayo Clinic are reported. With these cases the total number now recorded reach 147. The cases reported range in age from a few days old to 17 years.

PERRY GOLDSMITH.

Reviews of Books

Œsophagospasm as an Early Symptom of Carcinoma of the Stomach. Prof. Dr HERMAN SCHLESINGER. (*Wiener Klinische Wochenschrift*, 13th Dec. 1923.)

The author describes five cases in which the patient complained of, and was examined for, spasm of the œsophagus. The attacks of spasm lasted for varying periods from forty-eight hours up to four weeks. On careful investigation there was shown to be no organic lesion of the œsophagus, and the spasm was situated in the upper third, in four of the cases, and, in the lower third, in the fifth case. Two of the patients were not able to swallow anything at all during the spasmodic attacks, and the other three were only able to swallow fluids. There were no other symptoms of alimentary lesions, but on complete general examination there was found in every one of the five cases a carcinoma of the stomach. In four, the growth was at the pylorus and, in the fifth, it was situated in the fundus.

The spasm was of a transitory nature in most of the cases, and there was an interval of from a few days to several weeks between the cessation of spasm and the onset of gastric symptoms.

The association of spasm with gastric cancer lends an added gravity to cases of œsophageal spasm occurring in persons of middle or advanced life, and the possibility of such a cause of obstruction should be borne in mind.

F. C. ORMEROD.

REVIEWS OF BOOKS

Ear, Nose, and Throat Nursing. JAMES HARDIE NEIL, M.B.,
Auckland, New Zealand: Clark & Matheson, 1923.

In the course of training the nurses, in the majority of institutions at any rate, no special provision is made for instruction in the special detail of the nursing of ear, nose, and throat cases. This little work is designed to fill the gap and should prove of considerable utility. The essential points in anatomy and physiology are clearly described and illustrated. A short account of the symptomatology and treatment of the more common diseases is also included.

From the nursing point of view, instructions are given as to the detail of preparation for special examinations and operations, together with a full list of the necessary instruments. Details as to such routine treatment of diseases of the nose, throat, and ear, as falls within the scope of the nurse, are carefully described. We should