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swallowing at intervals for one month. He stated that for some years he had suffered from nasal catarrh and snored at night.

On examination.—The left vocal cord was nodular in appearance, with a large sessile nodule near its base, and a small pedunculated one close to the apex. The movements of the left cord were impaired. The Wassermann reaction was negative. No tubercle bacilli were found in the sputum and an examination of the chest also gave negative results. As complete rest of the voice for a month produced no changes except loss of pain on swallowing, on April 27th, 1932, under cocaine anæsthesia, the two larger nodules with several smaller ones were removed from the left cord by the direct method. They were reported to be composed of chronic inflammatory tissue with numerous plasma cells [microscopic sections shown]. The fixation of the left cord increased as the result of the operation, then slowly got less, but had only completely disappeared in July. The voice steadily improved and the patient returned to his occupation as teacher in September. When last seen (November 1st, 1932) there were numerous small white patches on the left cord which otherwise appeared to be almost normal.

DOUGLAS HARMER said that he regarded this condition as chronic sepsis, though he was not sure where the sepsis originated; probably it was in the tonsils. At present there was no loss of movement of the vocal cords. In certain cases of septic laryngitis there might be temporary loss of movement of the cords. It was a question whether temporary loss of movement was caused simply by congestion and swelling, or was due in some cases to the arytenoid joint being temporarily inflamed and painful, or to nerve involvement.

ABSTRACTS

EAR

The treatment of Recurrent Suppurative Otitis Media. JOSEPH SCHNIERER. (*Wiener Klin. Wochenschrift*, Nr. 10, Jahr 45.)

Intranasal instillation of "Pyocyanase" by means of a dropper has been used successfully in a number of cases to cure and to prevent recurrent otitis secondary to tubal or nasopharyngeal infection. It has been found especially useful in subacute cases in children, which had refused to yield to the conventional remedies after the removal of tonsils and adenoids, and which tended to chronicity. The drops are instilled into the anterior nares and thence into the pharynx three times a day whilst the child is in the recumbent position.

J. B. HORGAN.

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On Influenzal Otitis in Infants. EDWARD V. GYORGY. (*Wiener Klin. Wochenschrift*, Nr. 26, Jahr 45.)

The author believes that the pathogenesis of otitis in infants is not dependent upon developmental anomalies and the constitution of the individual alone, but to a still greater extent upon the actual infection, of which he recognises and describes four forms :

- (1) The hyperacute toxic form, characterised by a sudden severe onset with a temperature of 104° , vomiting, diarrhoea, and rapid development of subperiosteal abscess, followed by death in a few days in spite of paracentesis or mastoid operation.
- (2) An acute form in which the onset is not so rapid and the treatment is often successful.
- (3) A subacute form.
- (4) Cases which run a more protracted course.

A typical case of each form is described, with illustrative case charts. Whilst in the acute cases the ear symptoms predominate the clinical picture, it is found that in the subacute cases the catarrhal respiratory symptoms are more prominent.

J. B. HORGAN.

Bullets in the Ear; Report of Three Cases. BERT. E. HEMSTEAD (Rochester, Minn.). (*Jour. A.M.A.*, June 25th, 1932.)

In the first case the foreign body caused a discharge almost immediately and gave trouble more or less all the time until removal eighteen years later. In the second case, although there was profound deafness and facial paralysis, the middle ear tolerated the bullet for five years before any discharge was set up. In the third case more than eight years elapsed before the foreign body commenced to give trouble, and at removal a large cholesteatoma was found. In all three patients the bullets were removed by the radical mastoid operation and all made good recoveries.

ANGUS A. CAMPBELL.

Otogenous Tetanus. J. M. BISHOP, R. H. DUBOSE and FRED E. HAMLIN (Roanoke, Va.). (*Jour. A.M.A.*, April 30th, 1932.)

The writers report a case of clinical generalised tetanus complicating a recurrent purulent otitis media with recovery of *B. Tetani*. The case is that of a girl, three years old, whose left ear discharged off and on for over two years. No paracentesis was done and no history of injury could be obtained. The child recovered with antitetanic serum. A culture taken from the middle-ear and grown for five days on dextrose brain broth showed bacilli and terminal spores. Four guinea-pigs were inoculated intramuscularly, two were protected by antitetanic serum. The two unprotected guinea-pigs both died of tetanus shortly after inoculation.

ANGUS A. CAMPBELL.

Ear

Vital Function Studies ; Failure of Hearing in the Young ; a Study of a Rural Community. ALLAN WINTER ROWE and DANA W. DRURY (Boston). (*Jour. A.M.A.*, April 30th, 1932.)

In 1928 a group of 2,078 children from a typical New England rural district were examined for hearing acuity. By using a 4A audiometer and examining in groups, 590 children were thought to have some defect. These 590 were further examined individually by a 2A audiometer, when it was found that 276, or 13·3 per cent of the total, had a hearing defect sufficient to warrant report. Practically all the impaired group showed extensive focal and local infective processes. Fourteen of the group exhibited endocrinopathy, seventeen had lesions of the central nervous system and six showed otherwise uncomplicated infections. A psychometric study showed fifty children with established or possible mental retardation. Only one-half of the children complained of trouble in the ears while two-fifths made no complaint whatever.

ANGUS A. CAMPBELL.

The General Constitution and its Local Expressions (with special attention to the Internal Secretion, Anaphylaxis and the Connective Tissue Development). W. ALBRECHT (Tübingen). (*Acta Oto-laryngologica*, Vol. xvii., Fasc. 4.)

“By constitution we mean that personal quality which finds its individual expression among the manifold variety of morphological structure and cell functions.”

The conception of “general constitution” does not imply that all the cells of the body are in one person vigorous, in another weak, but that definite groups of cells in the main determine the general *habitus*. Isolated accidental findings, however, do not determine a diathesis; for example an eczema of the epidermis would not lead to the diagnosis of “an exudative diathesis” unless we found a tendency to catarrh in the mucous membrane.

Constitutional factors have a very considerable interest in the department of otolaryngology; to mention a single example, the importance of the immunising forces of the body. In tuberculosis this is well known, but an almost complete lack of defence to the non-specific viruses can be exemplified. Cases are quoted in which the constitution of the patient was powerless to resist the pneumococcus and streptococcus.

As the whole subject of the article is very wide the writer restricts himself to the following problems:

- (1) Internal secretions.
- (2) Anaphylaxis.
- (3) Connective tissue development.

(1) *Internal Secretion.*—In our speciality it is necessary to regard with a critical mind the wide claims that have been made under this

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title. The influence of diabetes and cretinism upon the hearing mechanism are discussed and references made to the experiments carried out by Voss and others on the supposed growth-retarding functions of the tonsils. Calcium metabolism in otosclerosis is mentioned. It is concluded, however, that the importance of endocrine disturbances in this field has been exaggerated.

(2) *Anaphylactic Alteration*.—In otolaryngological diseases undoubted examples of allergy are found. Anaphylactic oedema of the larynx, which runs in families, is a very dangerous condition. Hay fever is more troublesome than dangerous, but, in contrast to laryngeal oedema, the anaphylactic tissue in a family group is not restricted to the nose, as is shown by other allergic manifestations in members of the same family. The anaphylactic diathesis stands in close relation to the exudative diathesis. The latter is perhaps "the non-specific form of this pathological picture."

(3) *The Connective Tissue and its Development*.—The author and his colleagues have devoted special attention to this subject but have found it difficult to study. In the cadaver the mucous membranes of the sinuses, nose and throat, larynx and upper air passages have been examined, and also the development of the connective tissue of the middle-ear. Reference is made to the pneumatisation of the mastoid process, various bone diseases and otosclerosis. The writer concludes by advising in favour of the wider field of research as compared with restricted local morphological investigation in our speciality.

H. V. FORSTER.

NOSE AND ACCESSORY SINUSES

Olfactory Disturbances. ERNEST M. SEYDELL (Wichita, Kan.).
(*Jour. A.M.A.*, 20th August 1932.)

After reviewing the Specht classification, the writer gives a simplified outline which he has himself adopted and is as follows :

1. Quantitative disturbances.
 - A. Respiratory. Hyperosmia.
 - B. Essential. Hyposmia.
 - Anosmia.
2. Qualitative disturbances.
 - A. Respiratory. Cacosmia.
 - B. Essential. Parosmia.
 - Agnosmias.
 - Hallucinations.

The border line between the normal and pathological is impossible to define in all cases. Hyperosmia is most frequently congenital, although it may result from the use of such drugs as strychnine and

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The border line between the normal and pathological is impossible to define in all cases. Hyperosmia is most frequently congenital, although it may result from the use of such drugs as strychnine and

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cocaine. Temporary hyposmias are frequently the result of infectious diseases.

Anosmia may be congenital or acquired. In the former there is usually an absence of olfactory nerves. The acquired type may be unilateral or bilateral and is the result of various kinds of nasal obstruction. It often becomes permanent in influenza, ozæna, syphilis or the toxic action of certain drugs. It is also noted in various organic nerve lesions, fractures of the skull and new growths. Both the Proetz and Börnstein methods of testing the sense of smell are advised. If a patient fails to perceive an odour after an intravenous injection of an odorous substance a diagnosis of essential or psychic anosmia must be made. From a forensic standpoint it is difficult to determine the financial loss sustained by the patient in whom the sense of smell has been destroyed. In cacosmia the odour is always disagreeable, is due to the decomposition of tissue and is usually noticed by the patient on expiration. In parosmia the perverted odours are usually disagreeable. Influenza associated with sinus infection is the most common cause of one peripheral type, although it may be caused by the local application of certain drugs or the ingestion of others. Hallucinations of smell are frequently found as a symptom of brain tumour, epilepsy or insanity.

In patients with olfactory disturbances it is advisable to make tests of the sense of smell, nasal taste, nasal tactile sense and the gustatory sense.

Rhinologists are urged to procure a thorough post mortem examination in all olfactory cases.

The intravenous injection of smell substances appears to be valuable in (a) differentiation between the respiratory and the essential anosmias, and (b) the treatment of the peripheral parosmias.

ANGUS A. CAMPBELL.

Total Rhinoplasty by a Forced Rapid Method. G. S. TOPROWER.
(*Wiener Klin., Wochenschrift*, Nr. 33, Jahr 45.)

This paper, which is accompanied by two photogravures and two diagrams, describes the rapid restoration of a nose completely destroyed by syphilis in a girl aged 18 years. On June 20th, after a course of medicinal treatment, under local anæsthesia two large triangular flaps of equal size were raised from the cheeks. The bases of these flaps, which comprised the skin and underlying fat, remained attached along the sides of the potential nose. They were turned inwards so that their raw surfaces apposed each other as far as possible, the infolded area of contact forming the septum of the future nose. This septum was fixed anteriorly to a small freshened area of the upper lip. The skin surfaces of the flaps formed the lining of the nose. Drainage tubes were put in the nasal apertures. Immediately after this first operative act a second

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was carried out as follows: A flap, with its base down, was cut from the skin of the middle-third of the left upper arm and stitched with horsehair to the fresh facial wound so as to cover it completely, the hand being fixed to the head with plaster of Paris. On June 27th the flap was detached from the upper arm, primary union to the facial wound having occurred. The epithelialisation of the apex of the nose took place from the cross section of the flap and was complete on July 20th.

On July 16th a tibial bone graft of suitable length was inserted beneath the dorsum nasi with its periosteum below. This was introduced through a vertical incision of $1\frac{1}{2}$ cm. starting from the inner end of the left eyebrow, the wound being stitched up at once and primary union resulting. The patient returned home on August 5th, having passed fifty-four days in hospital.

J. B. HORGAN.

Concerning the Therapy of Colds with Iodine. L. HAYMANN.
(*Münch. Med. Wochenschrift*, Nr. 34, Jahr 79.)

The writer reviews the question of the prophylaxis and treatment of acute and chronic colds ("Schnupfen"), of attacks of pharyngitis and also of anginas, by iodine therapy as originally advocated by von Fink. He has learned to modify the optimistic views he formed of this remedy when he first employed it fourteen years ago. He now considers that on a broad reckoning there is considerable improvement in 25%, a moderate or doubtful improvement in 30%, and in 45% of cases there is no result. He is very sceptical of the beneficial results claimed by von Fink in follicular and lacunar tonsillitis.

J. B. HORGAN.

Vasomotor Rhinitis as a Bacterio-Allergic Disease (with a Discussion of its Aetiology and Therapy). TIBOR Z. LAKOS (Budapest).
(*Acta Oto-Laryngologica*, Vol. xvii., Fasc. 4.)

The most common form of this disease is that in which there is a sudden nasal obstruction, fits of sneezing and the production of quantities, occasionally enormous, of a transparent watery secretion. Other general symptoms complete the picture.

Vasomotor rhinitis is believed to be influenced by bacterial products and the author wished to find out whether or not there was in such patients any allergy toward bacteria living within the nose. Cultures were grown from the nasal secretions and a vaccine autolysate prepared. Most of the patients reacted to intracutaneous tests with the vaccine and were then treated by intramuscular injections. After treatment it was found that 88 per cent. of the patients gave no local or general reaction to the intradermal antigen tests, even with the concentrated vaccine.

Tonsil and Pharynx

The writer concludes that the micro-chemical products of the bacterial flora living in the mucous membrane of the nose are absorbed through it and sensitise the system.

H. V. FORSTER.

TONSIL AND PHARYNX

Pouches of the Pharynx and Œsophagus. A. S. MACMILLAN (Boston).
(*Jour. A.M.A.*, 19th March, 1932.)

A diverticulum is defined as a blind pouch which develops from a viscus or canal, and may consist of one or more layers of the part involved. In studying a series of a thousand patients complaining of dysphagia it was found that eighteen had a Zenker pulsion diverticulum of the pharynx and five had œsophageal pouches. None of the patients gave a history of foreign body. In the pharyngeal group the ages varied from 40 to 83 years, which rules out any suggestion of congenital origin. The duration of the symptoms varied from eight months to 6 years and all had regurgitation of unchanged food. Other symptoms varied according to the size of the pouch. The most reliable means of diagnosis was X-ray with barium paste. The sharply circumscribed lower border and spilling over of barium from the upper level of the sac were considered absolutely characteristic. The only treatment used was surgical removal by a two-stage operation.

In the œsophageal cases, one was in the upper third, and four in the middle third. Three of these cases complained of substernal distress, pain and dysphagia. Treatment of these cases is difficult but is not often necessary.

ANGUS A. CAMPBELL.

A loop-carrier for ligaturing vessels with one hand. W. TONNDORF (Dresden). (*Zeitschrift für Hals-, Nasen- und Ohrenheilkunde*, xxxi., Heft 2-5, p. 527.)

This is a snare tube with a tip curved like a Eustachian catheter and through it is passed the straight end of a slip-loop. The knot is so large as not to enter the tube and when the loop is passed over an artery forceps it is tightened by pulling the straight end. This is effected by means of the snare instrument. (This is a modification of the abstractor's method of applying Coakley's slip-loop through a fine glass or metal tube, the knot being large enough to be stopped by the tip of the instrument.—J.D.G.)

JAMES DUNDAS-GRANT.

Phlegmons of the Tonsillar Fossa and Tonsillectomy. An anatomico-pathological study of operative findings. GEORGES CANUYT and LOUIS GERY. (*Les Annales d'Oto-Laryngologie*, August, 1932.)

The expression "phlegmon" of the tonsillar fossa is preferable to that of "abscess" because the authors' researches have shown

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that, histologically, the inflammatory process has in all cases been one of diffuse phlegmonous infiltration. Moreover, the phlegmon has its anatomical situation in the tonsillar fossa. There is no doubt whatever that complete tonsillectomy is indicated in these cases. There is abundant histological evidence that associated lesions of a chronic and sometimes of an acute type are present in the tonsillar tissue.

M. VLASTO.

Pulmonary Abscess following Tonsillectomy. IRA FRANK. (*Annals of O.R.L.*, Vol. xli., No. 2, June, 1932.)

The author reviews the literature of this condition, and accepts the view that the route of infection is most likely to be *viâ* the air-passages, by aspiration of blood or of a remnant of tonsil.

A case is related in which such aspiration of blood did occur, following post-operative hæmorrhage; the clot was presumed from the clinical signs to have obstructed the left main bronchus. In order to stimulate respiration, inhalations of carbon dioxide were given, with the result that the patient coughed up a "fair sized" (sic) clot of blood. The suggestion is made that this form of treatment is, perhaps, worthy of further trial.

E. J. GILROY GLASS.

LARYNX

A Case of Amyloid Degeneration of the Trachea. ALPHONSE BAUER. (*Münch. Med. Wochenschrift*, Nr. 40, Jahr 79.)

A patient, aged 30 years, was admitted to hospital for removal of a goitre. The existing dyspnoea was attributed to the rather marked thyroid hypertrophy. By laryngoscopy a protuberance was visible beneath the vocal cords (illustration); this was attributed to the pressure of the thyroid. During operation on the thyroid severe asphyxia supervened and necessitated tracheotomy. As soon as the wound was healed a portion of the subglottic swelling was removed and, upon examination, was found to be an amyloid tumour of the trachea. The larynx and trachea were subsequently split, the tumour partially removed, and the base was then treated by thermo-cauterisation. After an initial success the mass has grown again. The possibilities of further treatment are discussed. The prognosis of this disease, of which less than seventy cases have been described, is always considered to be rather unfavourable.

J. B. HORGAN.

The Treatment of Acute Perichondritis of the Larynx. OTTO MAYER. (*Wiener Klin. Wochenschrift*, S.233, Nr. 45.)

In many cases the inflammation recedes of its own accord, but it must always be looked upon as a very dangerous affection demanding the most exact observation. Tracheotomy serves only to relieve

Œsophagus and Endoscopy

respiratory distress ; if the inflammation is limited to the arytenoid cartilage more may not be required. Mayer's clinical observation of nine cases and the pathological-anatomical examination of specimens have shown that the so-called " perichondritis laryngea " of adults is in reality an osteomyelitis. The diseased focus lies in the medullary space of the spongiosa. In the cricoid cartilage which, functionally, is the most important of the laryngeal cartilages, the inflammation lies at first in the lamina and from there spreads forwards into the arcus. The cartilage is not always uniformly ossified. It is important to remember that there may exist either a superficial bony layer which clothes the cartilage, or that the nucleus may consist of spongy bone at the periphery of cartilage.

The operative procedure of choice is laryngofissure. The medulla is to be widely opened and drained. The formation of a sequestrum is to be awaited, necrotic bone and cartilage are then removed. Extensive resection of cartilage and bone are both unnecessary and undesirable, particularly as regards the important cricoid (supporting) cartilage.

J. B. HORGAN.

ŒSOPHAGUS AND ENDOSCOPY

Guide for the passage of Œsophageal Dilators. PERCY B. DAVIDSON (Boston) and FERNANDO BIGURIA (Guatemala). (*Jour. A.M.A.*, September 24th, 1932.)

After a preliminary lavage of the cardiospasm sac, a stomach tube (28 French) is passed into the stomach with fluoroscopic aid to produce slight dilatation. The tube is then withdrawn and a small piano wire, with a small metal tip on the distal end, is pulled through a rubber catheter 26 inches long. This tube containing the wire is passed into the stomach and the rubber sheath withdrawn. This leaves the metal tip in the stomach and the wire in the œsophagus. The proper type of dilator (bougie or bag) may then be passed along the wire guide. This method has been used in fifty cases of cardiospasm and it is found that the wire is more easily passed and is less cutting than the taut thread.

ANGUS A. CAMPBELL.

MISCELLANEOUS

Progress in the Recognition and Treatment of the most important Poisons—7b. Cocaine Poisoning. ERICK LESCHKE. (*Münch. Med. Wochenschrift*, Nr. 34, Jahr 79.)

The writer describes extensively the objective signs as well as the psychical disturbances in cases of acute cocaine poisoning and also those found in chronic addicts to the drug. In the treatment of acute poisoning it is, in the first place, advisable to remove any poison which is still capable of being absorbed, by lavage of the nose,

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mouth and stomach. The fluid used for stomach lavage will be rendered much more effective by the plentiful addition of medicinal charcoal. It is a common error to administer morphine to quell the muscular excitability, as this drug also favours the onset of respiratory paralysis. Intramuscular injections of such well-known remedies for insomnia as Luminal, Pernokton, Somnifaine or Dial are preferable. The circulatory weakness may be countered by the intramuscular injection of Coramin and Cardiazol and threatening respiratory paralysis by the intravenous injection of Lobeline. The analogy of the clinical picture of chronic cocaine poisoning to that of Basedow's disease is described in detail, also the various forms of psychical disturbance which are engendered. The treatment of chronic poisoning and of the cocaine addict requires a course of abstinence. This can more easily be accomplished than in the case of the morphia addict, but the mental disturbance and physical weakness are often slow to disappear and demand careful after-treatment.

J. B. HORGAN.

Laboratory Investigations as aids in Oto-Laryngological Diagnoses.

L. W. DEAN. (*Jour. A.M.A.*, August 13th, 1932.)

Cytological examination of the nasal discharge is an important procedure in every patient with a nasal lesion and only slightly less important in ear conditions. Most cases with marked nasal eosinophilia have proved to be allergic. Smears from the nose should be taken through a double glass sleeve, and fluid from the sinuses should be removed by aspiration. X-ray pictures of the maxillary sinuses are often misleading, and no operation on the sinuses should be performed as a result of X-ray examination only. The writer has not yet discovered a discharge from the ear with many eosinophils. The presence of cholesterol crystals and fatty degenerated epithelial cells makes the diagnosis of cholesteatoma positive. In certain blood dyscrasias, with the earlier symptoms referred to the nose and throat, a proper differential count of the blood may make the diagnosis. When myelocytes are found in the course of an infection the condition must always be considered seriously and the time to operate may be decidedly influenced by a differential count of the blood. Blood cultures and cultures of the spinal fluid are often indicated. In tuberculous lesions, the Schilling differential count of the blood, together with the subcutaneous tuberculin test, is invaluable. When acid-fast organisms resembling tubercle bacilli are found in an ear discharge, guinea-pig injections should be resorted to. The Khan precipitation test and Wassermann test should be routine measures. The surgeon should examine the material secured at biopsy with the pathologist, and give him the benefit of his clinical knowledge.

ANGUS A. CAMPBELL.