infection was invariably found in the sinuses. Whether the infection was the primary cause or was coincidental infection, he did not know, and it was impossible to say. In the fifteen cases of early bronchiectasis which he had studied, there was, with one exception, a history of upper respiratory infection at an early period.

It had been his impression, from a pathological study of these cases, that aspiration with the bronchoscope offered as much hope as anything else.

B. MORGAN (in reply) said he agreed that the association of sinus disease and bronchiectasis was frequently found in children. In adults, too, in a large proportion of cases of bronchiectasis there was also sinus disease.

The result of sending patients so affected to Switzerland was very striking; their sputum cleared up in a remarkable manner, but when they came back to this country the symptoms often returned.

As good results were obtained by postural drainage as by aspiration to remove bronchiectatic material, especially if the Nelson bed was used, and patients could be got to sleep with the head inverted. Bronchoscopy must be distressing to the young child, and he presumed it was carried out without an anæsthetic.

ABSTRACTS

EAR

Disturbances of Taste of Otitic Origin, with special reference to Operations on the Ear. W. Y. H. HO (Shanghai). (*Archives of Oto-laryngology*, August, 1937, xxvi, 2.)

This careful and extensive study is prefaced by some account of the fairly extensive literature, and reference is made to twenty-two previous papers bearing upon the subject.

The patient suffering from disturbance of taste of otitic origin has no consciousness of any change, and the condition is discovered only by clinical tests. For this reason there is little reference to the chorda tympani nerve in recent otological literature.

The author uses as testing reagents, aqueous solution of cane sugar, 5 per cent., for sweet taste; sodium chloride, 10 per cent., for salt; acetic acid, 1 per cent., for sour, and quinine sulphate, 1 per cent., for bitter. He has found that the tip of the tongue is very sensitive to sweet taste and the sides of the tongue to other tastes. After each reagent is applied, the patient rinses his mouth and talks for a short time. Naturally the method is tedious, and demands patience from both examiner and patient. In lesions confined to the tympanic cavity the chorda tympani nerve, situated high in the attic region, is unlikely to be affected, but when the lesion affects Shrapnell's membrane, with cholesteatomata or necrosis of the ossicles, it is more likely to be involved. Taste was absent in the ipsolateral anterior two-thirds of the tongue in all seventeen cases

tested by the author after radical mastoidectomy, in one case of ossiculectomy and in two of modified radical operation. It was also absent in three cases of facial paralysis following mastoidectomy. There was no change in the sensations of taste in three cases of acute suppurative otitis, two of which had undergone paracentesis, nor was any alteration of taste detected in ten cases of impacted cerumen (although Carrari has reported positive results). Absence of taste was noted in a case of paralysis of the sixth and seventh cervical nerves complicating fracture of the skull, and recovery of the functions of those nerves was accompanied by a return of the sense of taste.

As an aid to diagnosis of the site of the lesion in facial paralysis, tests of taste are of value and an illustrative case is quoted.

DOUGLAS GUTHRIE.

The Radical Mastoid Operation. L. F. FROUMINE. (*Revue de Laryngologie, Otologie, Rhinologie,* April, 1937, 4.)

The author reviews the causes of failure to obtain a dry cavity. In the operative steps, he lays stress on avoiding damage to the temporal muscle, to keeping the cavity as small as is consistent with complete removal of infected bone, to a meticulous curettage of the middle-ear mucosa, and careful planning of the meatal flaps.

In the after-treatment he advocates an unpacked cavity—with the meatus exposed to the air—kept as dry as possible by using powders, either boric or boric and tannic acid, as moisture favours the growth of mucous membrane at the expense of the epithelium. Rough mopping of the cavity is avoided. Between the second and eighth days the cavity fills with œdematous and soft tissues, but by the twelfth day the pale granulations begin to shrink, and epithelialization begins from the third to the fifth week.

C. GILL CAREY.

On an Indication of an Intracranial Complication in the course of an Acute Mastoiditis. H. NEUMANN. (*Trans. Öst. Hals. Nasen Ohrenärzte. Monatsschrift für Ohrenheilkunde,* 1937, lxxi, 972.

A throbbing or beating in the ear, synchronous with the pulse, is an important symptom in cases of otitis media. In certain circumstances, its cessation can be of even greater significance.

A woman showed signs of labyrinthine irritation during a five weeks' otitis with profuse discharge. A throbbing, which had been present in the affected ear for some time, ceased suddenly one week before operation. On opening the mastoid, a large perisinus abscess was discovered. The probable explanation is that the beating ceased when the hard sinus plate became eroded and pressure was relieved.

Several cases of perisinus or extradural abscess, while showing no other evidence of any extradural complication, were diagnosed by cessation of the throbbing. This symptom can, of course, also disappear when spontaneous healing takes place.

DEREK BROWN KELLY.

Otogenous Gravitation Abscess. T. MOTLOCH. (*Trans. Öst. Hals. Nasen Ohrenärzte. Monatsschrift für Ohrenheilkunde*, 1937, lxxi, 965.

A patient suddenly had an acute exacerbation of an old-standing otorrhœa. A rigor was followed by the appearance of an abscess in the region of the anterior faucial pillar. The suppuration extended along the sheath of the great vessels to the level of the larynx. At operation, a cholesteatoma which had exposed the sinus and bulb was discovered. Pus beneath the sinus plate was under considerable pressure. In the neck, a parapharyngeal abscess and phlegmon was found reaching down to the larynx and filled with the same foul pus as the ear. The sinus and jugular vein were not thrombosed. Apparently the pus took the unusual route through the jugular foramen.

DEREK BROWN KELLY.

NOSE

Headaches and Neuralgias of Nasal Origin. A. LASKIEWICZ. (*Polski Przeglad Oto-Laryngologiczny*, xiii, 3-4.

Headache may arise from as simple a cause as the pressure of a deviated septum or of a bony septal spur upon the middle concha. Another common cause of pain is mucocele of the frontal sinus or of the anterior ethmoidal cells, as this accounted for 25 per cent. of the writer's cases of headache of nasal origin.

Pain in the orbit may result from " partial vacuum within the frontal sinus (Sluder) or more rarely within the ethmoidal cells or sphenoidal sinus ". The pain is relieved by local application of adrenaline.

The occipito-cervical syndrome consists of irritation of the first or second cervical nerves by an inflammatory lesion of the articulations of the cervical vertebrae, which can be demonstrated by radiography.

Under the heading of treatment, the author discusses operations on the septum, the surgical treatment of mucoceles, injections into the spheno-palatine ganglion, short-wave diathermy and medicinal treatment.

DOUGLAS GUTHRIE.

Abstracts

TONSIL

The Function of the Tonsils and their relation to the Ætiology and Treatment of Nasal Catarrh. IVOR GRIFFITHS (London). (*Lancet*, September 25th, 1937, ccxxxiii, 5952.)

The operation of tonsillectomy has been practised somewhat indiscriminately in many cases. A study of 4,500 children sent to hospital for tonsillectomy showed that in 31 per cent. of the cases there were no symptoms, the tonsils having been discovered to be slightly enlarged on routine examination. Apparently the observer had overlooked the fact that physiological enlargement of the tonsil is found between the ages of 4 and 6 years and again at puberty, and that temporary enlargement is an accompaniment of the common cold.

There is a widespread notion, unsupported by observation, that tonsillectomy prevents otitis media. Tonsillectomy is also recommended, on insufficient evidence, as a treatment for nasal catarrh. The writer has observed 385 cases in nearly all of which the catarrh was worse after operation than before. He suggests that an explanation for this should be sought in the accessory nasal sinuses. In the 385 cases under his care, nasal sinus disease was present, usually in the maxillary sinus, but in the ethmoidal cells in fifteen and in the frontal sinus in three children. He conducted a number of experiments on animals and found that Indian ink, introduced into the nasal sinuses, appeared in the tonsil. From this he argues that the tonsillar enlargement may be the result rather than the cause of nasal catarrh. He found that sinusitis was actually commoner in children who had undergone tonsillectomy than in those whose tonsils were intact. He admits that removal of adenoids alone is justified in nasal catarrh, but he regards the removal of tonsils for nasal catarrh as illogical.

Mild cases of nasal catarrh in children may be treated by the instillation of 5 to 15 per cent. argyrol, attention to nutrition and general hygiene, and breathing exercises in the open air. For more severe cases puncture and lavage of the maxillary sinuses is necessary, and this may be performed under local anæsthesia. The results of antrostomy in children are bad, as the opening often closes and an area of scar tissue devoid of ciliated epithelium is created. DOUGLAS GUTHRIE.

LARYNX

Treatment of Bilateral Recurrent Laryngeal Palsy. Dr. A. SCHREIDER (Munich). (*Münchener Medizinische Wochenschrift*, October 8th, 1937, xli, 1606.)

This is an investigation into the occurrence of laryngeal palsies after thyroid operations. A laryngeal palsy is eight times as common after an operation for a recurrent goitre than after the

primary operation. The position taken by the paralysed cord is discussed. It may lie in the intermediate, paramedian or median position. The reasons for this are unknown, but it is suggested that some cases get some innervation from the superior laryngeal nerve. In an investigation of 1,019 thyroid operations, eighty-five had some laryngeal palsy in the first eight days but only fourteen still showed a palsy after six months.

The operations suggested for a permanent bilateral palsy are discussed, but as any operation which gives a free airway destroys the voice, the author is of the opinion that the best results are given by a permanent tracheotomy with a speaking (inspiratory) valve. Some designs of tubes and valves are shown.

G. H. BATEMAN.

BRONCHUS

The Bronchoscopic Treatment of Bronchiectasis. M. COUTTS (Sydney). (*The Medical Journal of Australia*, July, 1937.)

This report deals with twenty cases of bronchiectasis. Seventeen of the patients were submitted to bronchoscopy, eight of them on one or two occasions and the remaining nine more frequently, the combined number of treatments amounting to over one hundred. Bronchiectasis is usually treated by expectorant mixtures, by the eradication of nasal sepsis and by postural drainage, but bronchoscopic drainage will achieve more than any other method.

Nasal sinusitis (maxillary) was found in eighteen patients in the present series. Its importance is insufficiently stressed. Any child suffering from cough and not cured by tonsillectomy and adenectomy, should be suspected of nasal sinusitis and of being potentially bronchiectatic.

The writer describes his method and discusses the conditions found. For young children he employs avertin as the anæsthetic; for older children and adults, decicain with adrenalin is an efficient local anæsthetic. Eusol is used for lavage, 10 to 30 c.cm. in each side. Secretion is then removed by suction and coughing, and 10 c.cm. of a 5 per cent. solution of "Titrol" in poppy seed oil are instilled and left in the bronchi. The next treatment is undertaken as soon as the patient or his relatives notice any return of the odour. The instrumentarium is that devised by Dr. H. V. Morlock and the late Dr. Scott-Pinchin, to whose writing and personal encouragement the author acknowledges his indebtedness.

DOUGLAS GUTHRIE.

Spontaneous Perforation of the Wall of the Chest by an Aspirated Foreign Body. E. M. SEYDELL (Wichita). (*Archives of Otolaryngology*, August, 1937, xxvi, 2.)

The writer gives details of eleven cases in which a foreign body was aspirated into the bronchus, passed through the lung and the

pleural cavity and presented under the skin of the chest wall. The record includes one case personally observed, and ten cases culled from literature, the two earliest having been reported as long ago as the year 1818. In ten cases the foreign body was an ear of barley or oats; in the eleventh case it was a twig from a juniper tree, and in each case the foreign body passed through the right bronchus and appeared between the ribs under the right wall of the chest. Eight of the patients were children under 6 years of age. In eight of the eleven cases reported, a diagnosis of foreign body in the lung was not made until after the foreign body had been extracted through the chest wall. The shortest time which elapsed between the aspiration of the foreign body and its appearance under the skin of the chest wall was eight days, and the longest one year (the case of juniper twig). The occurrence is rare, no case having been observed in Philadelphia, where more than 3,300 foreign bodies have been removed from the air and food passages.

DOUGLAS GUTHRIE.

Clinical Researches on Foreign Bodies in the Respiratory Tract. H. LEWENFISZ. (*Revue de Laryngologie, Otologie, Rhinologie,* May, 1937.)

The first part of this article gives a summary of clinical signs of foreign bodies in the respiratory tract. A number of interesting cases are fully reported and some advice as to the removal of foreign bodies is given.

In the second part, the results of experiments on dogs are given. From the experiments, the author concludes that damage to the mucosa, by repeated introduction of foreign or bacterial inflammation, prevents the expulsion of a foreign body. His experiments also show that complete obstruction produces radiological evidence of atelectasis. He found that the usual complications, pneumonia and lung abscess, occurred after a prolonged stay of a foreign body with complete obstruction of the bronchus.

C. GILL CAREY.

MISCELLANEOUS

The Corpus Striatum and the Function of Equilibrium. DELMAS-MARSALET, BERGOUIGNAN and VERGER. (*Revue de Laryngologie, Otologie, Rhinologie,* April, 1937, iv.)

This seventy-two page article gives a clear review of the experimental works leading to the present knowledge of the function of equilibrium. It is pointed out that this work is by no means complete, and the investigations undertaken by the authors on the function of the corpus striatum were designed to obtain more precise knowledge of the rôle of the corpus striatum.

An historical summary of the researches on the function of the corpus striatum precedes the main part of the articles, a description

of the results of destruction of the caudate and lenticular nuclei in dogs. These findings are compared with reactions obtained by stimulating the labyrinth in eight cases of Parkinson's syndrome secondary to encephalitis, a disease known to affect the basal ganglia.

It was found that destruction of the caudate nucleus produced a slight curvature of the neck and spine to the damaged side. Destruction of the lenticular nucleus gave rise to a marked curvature with rapid forced movements in the same direction. Stimulation of the labyrinth in these animals produced normal nystagmus, but with a great increase of the postural and rotatory reactions towards the damaged side, and absence of these reactions towards the other side. Very similar results were obtained by stimulating the labyrinth in cases of encephalitis with Parkinson's syndrome.

The article is accompanied by a full bibliography.

C. GILL CAREY.

Subcutaneous Emphysema in Diphtheria. A. H. G. BURTON and J. H. WEIR. (*Lancet*, 1937, ii, 740.)

The authors record a case of this rare condition in a boy aged 9 years and discuss it, together with the records of other cases published by Berkeley, Coffen, Dobbie, Mason, Rolleston and Thompson. It would appear that the air may escape by one of three routes: either through a diphtheritic perforation of the larynx or trachea; or intrapleurally through a breach in the visceral pleura and subsequent perforation of the parietal pleura from the pneumothorax thus formed; or extrapleurally, in which case the air escapes from the lung along the course of the blood-vessels to the posterior mediastinum, and thence to the superior mediastinum, to appear first in the lower part of the neck. In the case under discussion, it was impossible to discover the point of air-leakage, although the first impression gained was that the lesion was situated in the region of the larynx or trachea. It is, however, suggested that the third route of leakage was probably that which obtained.

MACLEOD YEARSLEY.

Diphtheritic Hemiplegia. J. M. KENNEDY. (*Lancet*, 1937, ii, 851.)

The author describes this rare condition, in a girl of 7, giving references to the few recorded cases, quite distinct from the more common paralysis following diphtheria. He considers, for the following reasons, that it was due to a primary cerebral thrombosis. (1) Gradual onset, aphasia being the first symptom detected. (2) Extremely low blood pressures: 75 systolic, 25 diastolic. (3) Consciousness never lost. (4) Absence of red blood corpuscles from the cerebro-spinal fluid. (5) Slow, steady return of power, leaving very few sequelae. The child was in hospital 121 days.

MACLEOD YEARSLEY.