ABSTRACTS

EAR.

Changes in the Mastoid Process in Cases of Acute and Chronic Otitis Media as shown by the X-rays. L. REVERCHON and G. WORMS. (*L'Oto-Rhino-Laryngologie Internationale*, April 1923.)

The authors find skiagraphy very helpful in cases of disease of the mastoid process and are surprised that the method is not more widely used. In general, the conditions found at operation are in agreement with what is shown in the skiagram. Pictures are taken of either side in the oblique lateral position—the rays entering as nearly as possible parallel to the meatus—and a third plate showing both sides of the head. The former show the parts in the relation in which they are approached surgically, while the latter has the advantage of showing both mastoid regions for comparison on the same plate. In acute otitis, even if mild in degree, changes are invariable in the skiagram of the mastoid region even during the first few days. This, as seen on the skiagram of the base, takes the form of a slight blurring of the outline of the cells on the affected side. It is an indication of tumefaction of the lining membrane, and, if resolution takes place, persists for a considerable period. If suppuration occurs, opaque areas are noticed with a gradual disappearance of the normal cellular outline. In cases of cholesteatoma, the cavity is seen surrounded by a dense shadow of eburnated bone. The compact mastoid throws a uniformly dense and structureless shadow of sharp outline. The situation of the antrum cannot usually be determined, but the lateral sinus is more easily located in these cases than in the normal, owing to the relatively greater disproportion in density. The compact type of mastoid should be regarded as pathological for the following reasons: skiagrams of the normal adult mastoid show a greater or less degree of cellular development in all, and this is invariably symmetrical in the absence of disease. The compact type is much more frequently found in cases submitted to operation than in the examination of anatomical specimens. In a skiagraphic examination of 30 cases of chronic suppuration without clinical evidence of mastoid complication, the mastoid process was uniformly dense and acellular. In addition, the density in cases of unilateral disease is found to be confined to the side of the lesion, or, in bilateral cases, is more marked on the side in which the disease has been more prolonged. In cases in which infection has dated from infancy, the mastoid process on the affected side is found not only to be sclerosed but also to be smaller in outline than the healthy side. These observations demonstrate that sclerosis is the result of infection. A. J. WRIGHT.

Ear

Primary Suture of the Wound in the Operation for Acute Suppuration of the Middle Ear. GEORG KARL MÜLLER, Erlangen. (*Archiv. für Ohren-, Nasen-, und Kehlkopfheilkunde*, Bd. cxi., heft 1, 1923.)

Subjective sensations of throbbing, synchronous with the pulse, associated with obscuration of the parts of the malleus by inflammatory swelling of the drum, which fail to subside within fourteen days of the onset of acute suppuration of the middle ear, are generally, in Müller's experience, due to retention of pus in a peripheral mastoid cell. Less commonly, the empyema lies in the root of the zygoma, in a tube cell, or in the petrous portion, when stereoscopic radiograms are a valuable aid to diagnosis. The retention of pus may be relative or absolute.

Müller opens the empyema, but refrains as far as possible from interference with the antrum or mastoid cells as a whole. He closes the wound by primary suture. He disregards any slight swelling or tenderness of the wound in the absence of fever or graver symptoms.

His statistics show as low a mortality as those quoted from other sources. The advantages of the method are reduction of the healing period from five or eight weeks to two or three weeks, avoidance of bony necrosis leading to fistula, set up by the pressure of tamponades, and lastly, better cosmetic results. Primary suture is contra-indicated in the presence of intracranial complications, Bezold's mastoiditis, extensive subperiosteal abscesses, and certain difficulties in connection with the operation wound. It is less applicable in children in whom an empyema is commonly situated in the antrum.

Müller considers that the method of primary suture ranks among the most noteworthy advances in mastoid surgery since the introduction of Schwartze's antrotomy. WM. OLIVER LODGE.

Drainage of Cerebellar Abscess. EAGLETON M. WELLS. (*Revue de Laryngologie*, 30th November 1922.)

Abscess of the cerebellum of otitic origin may be divided into (1) those situated anteriorly, in front of the lateral sinus, and (2) those situated immediately below and behind the sinus. The first class is roughly twice as numerous as the second. The cases occur secondarily to infection traversing the petrous bone. The second class follows phlebitis of the sinus.

The writer discusses the route of approach to abscesses situated anteriorly. He considers that incision of the dura in front of the sinus gives insufficient room for exploration, and is dangerous on account of the proximity to the great lymph spaces at the base of the brain. Even if exploration is negative, there is great risk of fatal meningitis as the result of opening the meninges through an infected area.

More room may be obtained by chiselling away the posterior labyrinth, but this is an unnecessary mutilation in cases where the labyrinth is not infected. Double ligatures and division of the sinus, as practised by Bourquet, give more room, but the technique is difficult and the procedure somewhat risky, especially if the sinus is a large one.

Wells advocates free exposure of the sinus, by ample removal of bone and incision of the dura behind and parallel to the sinus. The sinus is then displaced forwards and obliterated by pressure. The writer states that a good exposure of the lateral lobe of the cerebellum is thus obtained, and the brain is approached through a comparatively non-infected area. G. WILKINSON.

Vertigo in Neurotics. Dr R. LEIDLER and Dr P. LOEWY. (*Monats. für Ohrenh. und Laryngo-Rhinologie*, Year 57, Vols. i. to v.)

This long report represents a very thorough examination of 78 cases of neurosis, including neurasthenia, hysteria, migraine, and various other allied conditions. The article is divided into two main portions—the otological by Leidler, and the results of the neurological investigations by Loewy.

It does not lend itself to abstracting. Certain points of interest, however, are perhaps of clinical importance, and will serve to indicate the careful way in which the investigation was conducted.

Spontaneous nystagmus was present in all but 14 of the 78 cases, although it varied much in duration, intensity, and direction. Much variability also was found as regards the nystagmus in response to the vestibular tests.

On examination of the static sense, 22 showed a constant positive "Romberg," whilst in 21 this phenomenon was absent, and in the remaining cases results were variable.

Abnormal response was also found in the falling reaction after the vestibular tests, and the by-pointing results proved extraordinarily irregular, except that apparently a very definite tendency in one direction prevailed, irreconcilable with the stimulus induced.

In a group of cases such as this, various incidental middle ear and cochlear lesions were of course found. Their exact condition was carefully noted and taken into consideration.

The neurological part includes a most exhaustive examination of all the various symptoms and psychical complaints associated with various neuroses, and ascends, as one would expect, to more highly specialised heights than otologists can follow.

The authors conclude with the following replies to some of the questions which they had set themselves to answer at the commencement of their undertaking.

Nose and Accessory Sinuses

1. The subjective static phenomena in connection with neurotics show every possible variation in movement, although both intensity, quality, and direction may be accurately determinable for the individual. The objective appearances most often found are spontaneous nystagmus and by-pointing, together with falling and tumbling movements.

2. No outstanding difference between the phenomena as the result of organic disease and the condition in the neurotics exist. Quantitative variation in respect of frequency and intensity may be said to constitute a main point of differentiation.

3. Associated with the vertigo, headache and "vegetative" symptoms are prominent. This latter term the authors have coined as representing a condition of the neurotic's "giddy attacks," which they consider are not true vertigo. The "giddiness" comprises really, in their opinion, only a part or a phase of the primary subjective phenomena of the attacks.

To the remainder of their questions they find it difficult as yet to offer any satisfactory reply. They suggest that even the amount of research which they have undertaken, and the data gained, should only be regarded as a mere introduction to an investigation which should be still further pursued. The report will be valuable at any rate as a reference, and should certainly serve towards the further association of the neurologist and otologist, whose close collaboration in the diagnosis of these cases is rapidly becoming more and more imperative. ALEX. R. TWEEDIE.

NOSE AND ACCESSORY SINUSES.

Specific Infection as the Cause of Ozæna. BRUNO BUSSON. (*Münch. Med. Wochenschrift*, No. 14, Jahr. 70.)

The investigations carried out by Shiga and Busson at the State Sero-Therapeutic Institute in Vienna are a substantial reaffirmation of the assumption that this disease is due to the cocco-bacillus fœtidus ozænæ first described by Perez.

The main argument against the assumption of Perez is based on the inability of subsequent investigators to discover the cocco-bacillus in all cases. The failure may be largely obviated by noting that the bacillus is more difficult to demonstrate in old-standing than in recent phases of the disease, and by examining, not the crusts which swarm with saphrophytes especially the B. proteus, but the secretion lying directly on the mucous membrane and beneath the crusts. The investigators were able to reaffirm all the distinct characteristics attributed by Perez to the cocco-bacillus. Such were, the production of the typical fœtor in the artificial culture, the high pathogenesis in

puppies and the concomitant affection of the nose in the animals experimented upon. The Perez bacillus secretes a poison which it imparts to the fluid culture medium, and this is then capable of producing changes analogous to those produced by the living organism.

JAMES B. HORGAN.

An Operation for Atrophic Rhinitis (*Ozæna*). JAMES ADAM, M.A., M.D. (*Brit. Med. Journ.*, 16th June 1923.)

This is another attempt to alleviate the condition by reducing the undue width of the nasal passages. The author had found the paraffin method beneficial at times, but unreliable, while Halle's dislocation of the naso-antral wall towards the middle line seemed to him rather a formidable operation. Under local anæsthesia and after efficient cleansing of the area, flakes of cartilage removed from a costal cartilage are introduced under the muco-perichondrium of the septum and of the antral wall, between the middle and inferior turbinals. The incisions are closed by careful packing with bismuth gauze which is left for four or five days. Only one side of the septum should be dealt with at a time to avoid necrosis, and the necessary amount of cartilage required for the second operation can be stored in a subcutaneous pocket.

T. RITCHIE RODGER.

The Peptone Treatment of Spasmodic Rhinorrhœa. GEORGE PORTMANN. (*Revue de Laryngologie*, November 1922.)

The writer's contention is that some cases of spasmodic coryza are due to albuminoid poisoning, and are therefore to be classed with urticaria, asthma, and hay fever as manifestations of anaphylaxis. The antianaphylactic treatment employed by him consists in the administration of beef peptone (0.25 gram.) in a cachet, a quarter of an hour before the midday and evening meal. He reports 4 cases cured out of 8 in which the treatment was tried. All the cases were very severe. The peptone treatment was first instituted by Valery-Radot, Haguenan, and Watelet in 1921.

G. WILKINSON.

Lesions of the Nasal Sinuses and Optic Nerves. A. SARGNON. (*L'Oto-Rhino-Laryngologie Internationale*, May 1923.)

The author reports some cases of retro-bulbar neuritis in association with latent infection of the posterior ethmoidal cells or sphenoidal sinuses. Transillumination of the sphenoidal sinuses, by means of a small light placed against the floor and a telescopic tube against the anterior wall of the sinus, may be helpful. Skiagraphy is occasionally useful, and for this, frontal and parietal views should be taken. The cases are almost invariably unilateral, and retro-bulbar pain on movement of the eyes is frequent. The diagnosis of retro-

bulbar neuritis due to a latent sinusitis is made by exclusion. In the absence of any other cause, and if the Wassermann is negative and antiseptic treatment unsuccessful, one should act on the assumption of a latent ethmoidal and sphenoidal infection. In some cases the condition progresses to loss of vision, but others recover spontaneously. It is, however, wrong to withhold treatment on the chance of recovery, provided such treatment does not involve undue risk to life. This is often more necessary in bilateral cases. The interference should be carried out as early as possible. In the absence of orbital or other severe complications, the intranasal route should be followed, preferably under local anæsthesia. Operation consists in removal of the middle turbinal and opening up of the posterior ethmoidal and sphenoidal sinuses. If thought advisable, this can be done in two stages. Removal of the middle turbinal alone is sometimes effective in producing improvement of the vision. This may be due to drainage, or possibly, in some cases, to the relief of congestion by hæmorrhage. Five cases are related in detail. A. J. WRIGHT.

A Critical Review of the Surgery of the Lachrymal Apparatus. Dr A. BLUMENTHAL. (*Folia Oto-Laryngologica*, Vol. xxi., Nos. 6-8, p. 223.)

Disorders of the lachrymal apparatus are fully dealt with, and the merits of the West and Toti operations are discussed. On the whole, the endonasal operation is preferable, but it has, of course, its limitations. A large opening exposing the whole of the inner wall of the sac is recommended, and this wall should be entirely removed. The difficulties of localising the inner wall of the sac are pointed out, and the use of a probe passed into the sac pushing the inner wall medially is encouraged. Various modifications introduced by other workers are criticised.

General anæsthesia is recommended only in children. The endonasal operation has yielded good results in lupus and tuberculosis, but it is too early yet to dogmatise. The author concludes by emphasising the importance of a correct diagnosis and an accurate technique, so that by uniform results and few mishaps we may convince the ophthalmologist of the merits of the nasal operation.

ANDREW CAMPBELL.

Sphenoidal Sinus Suppuration. GUSTAV SPIESS. (*Münch. Med. Wochenschrift*, No. 2, Jahr. 70.)

The frequency with which this affection evades diagnosis may be surmised from the fact that, since the last influenza epidemic, post-mortem examination has revealed the sinus to be affected in an

even larger percentage of cases than the maxillary antra. Radiography, though helpful, will often fail to assist in the diagnosis.

The writer in forming his diagnosis places more reliance on the following symptoms of the disease. The headache could be better described as an indefinable pressure than as a pain. It is localised in the temporal region or on the vertex, and is almost continuous, without exacerbations. The patients display a furtive, anxious appearance and are frequently the victims of severe psychic depression. They are incapable of mental concentration. They are easily tired mentally and physically, and often complain of sleeplessness.

Amongst eye symptoms may be mentioned asthenopia, conjunctivitis and constriction of the visual field.

The history of the onset of the affection, particularly if influenzal, is an important help.

Given such a history and the above symptoms the writer has no hesitation, even in the absence of any definite radiographic indications, in formulating the diagnosis of sphenoidal sinus suppuration with possible involvement of the posterior ethmoidal cells, and in instituting the appropriate operative treatment. The diagnosis has been almost invariably confirmed, not by the actual conditions seen at the operation but by the success attending the procedure.

JAMES B. HORGAN.

LARYNX.

Diagnosis and Treatment of Tuberculosis of the Larynx. L. de REYNIER. (*Archives Internationale de Laryngologie-Otologie, etc.*, June 1923.)

The author is laryngologist to a large sanatorium in Switzerland, and his work is based on many thousands of cases. In his opinion the prognosis of tuberculous laryngitis, except in the case of children, is far less gloomy than is commonly supposed. He shows how the situation and appearance of the lesions affect the gravity of the outlook.

He states that the evolution of the lesions in tubercular laryngitis is independent of the progress of disease of the lungs. Many cases of tubercular laryngitis have been witnessed in cases where the patients have died of pulmonary lesions. But he has never seen a case of pulmonary tuberculosis recover in which the laryngeal disease has got progressively worse. After contrasting the effects of the various forms of treatment of these cases, he states that in his experience the galvano-cautery offers the very best hope of a cure. He proceeds to give in considerable detail the technique of this method. He concludes by quoting a number of cases so treated. M. VLASTO.

Larynx

Amyloid Tumour Formations in the Larynx. V. UCHERMANN and FRANCIS HARBITZ. (*Acta Oto-Laryngologica*, Vol. v. fasc. 2.)

A man, 69 years of age, complained of gradually increasing hoarseness, noticed for three years, which was found to be due to a tumour in the anterior part of the larynx below the epiglottis. It was pale red in colour, of the size of a haricot bean, and ulcerated over a small area behind. It was removed by the endolaryngeal route with the galvano-cautery.

In the course of a post-mortem examination on a man 60 years of age who died of general paralysis, the larynx was found to present several greyish yellow excrescences covered by intact mucous membrane on the vocal cords, the anterior surfaces of the arytenoids, the aryteno-epiglottic folds and the posterior surface of the epiglottis.

In both of these cases microscopic examination showed the tumours to consist of large irregular masses of amyloid material embedded in a connective tissue matrix.

Localised amyloid tumour formations are rare. Their presence in the air passages (including pharynx and base of tongue) has been recorded in 60 cases. They are found occasionally in all parts of the respiratory tract from the nose to the lungs; in the larynx they occur chiefly on the posterior surface of the epiglottis and the aryteno-epiglottic folds. Generalised amyloid degeneration is occasionally accompanied by somewhat similar tumour formations, but is absent in most cases of isolated amyloid tumours, the cause of which is at present quite unknown. THOMAS GUTHRIE.

Cyanosis during Operation, due to a Membranous Epiglottis. W. M. WHARRY, F.R.C.S. (*Brit. Med. Journ.*, 25th August 1923.)

In this case, breathing became difficult during an operation for tonsillectomy, and artificial respiration did not lead to any improvement. The larynx was then examined with the finger, and it was found that the epiglottis was flaccid and entirely devoid of cartilage, suggesting the feel of soft wash-leather. It lay right over the larynx, in contact with the posterior wall of the pharynx, thus acting as a valve, permitting a little air to escape from the chest but none to enter.

The epiglottis was hooked forward with the finger and respiration was quickly re-established. The author thinks this condition may be the cause of some otherwise unexplained cases of respiratory difficulty under an anæsthetic. T. RITCHIE RODGER.

Tracheo-laryngostomy. Professor GHERARDO FERRERI. (*Archivii Italiani di Laringologia*, Anno 43, Nos. 1, 2, 3, and 4, 1923.)

Professor Ferreri opens by claiming for Ruggi the credit of first performing the operation, though it was later elaborated by laryngologists

of other countries. He defines tracheo-laryngostomy as a complete and continuous opening of the larynx and upper part of the trachea, which is preserved until the air-way has been dilated to the desired extent, when it can be closed by an autoplastic operation which leaves the air passages lined with epithelium and of normal dimensions.

The operation is very useful in cases of stenosis following chondritis, perichondritis, suppuration round a foreign body, neoplasm and fistula into the œsophagus. It is not advisable in cases of paralysis, ankylosis or failure of development, or in patients suffering from tuberculosis or syphilis. Very small babies stand the procedures badly, and old people tend to contract broncho-pneumonia.

The operation is very useful for cases following wounds, fractures, and especially gun-shot wounds, but should not be attempted while there is any necrosis of cartilage. Ferreri always does the operation as a set operation, performing a tracheotomy in urgent cases. He lays great stress on the most meticulous sterilisation of skin and of the mouth and uses warm calcium hypochlorite solution.

Except in small children and very nervous patients he uses local anæsthesia, relying on Schleich solution first, and then a solution of cocaine and adrenalin applied under control of the laryngoscope, followed by injection through the cricothyroid membrane or tracheotomy wound. General anæsthesia, when used, is administered by a Kühn's tube. A long incision divides the soft parts from hyoid to sternum. The third and fourth rings of the trachea are incised and a cannula inserted. The thyroid cartilage is divided by cartilage shears and the two alæ are retracted. The cricoid and upper rings are then divided and the whole wound opened up. Any tumour or cicatrix is now dissected away, and, if necessary, part of the cricoid cartilage removed. The author then packs the cavity with compressed cotton-wool pledgets, wrapping in gauze and smearing with ointment. He condemns the use of rigid dilators at this stage. When the raw surfaces have epithelialised he takes a cast of the inside of the widened air-way in wax, and makes a silver or vulcanite dilator with a cannula at its lower end for the trachea. This accurately fits the walls of the larynx and the subcricoid space and keeps up a steady pressure. When it is considered that the larynx has reached a stationary condition the dilator is removed and the anterior incision is closed. The author does not suture the edges in the middle line, as a cicatrix in the line of the laryngostomy is unsound surgically, and leads to laryngocele. He turns over a rectangular flap of skin from the neck on to the opening, cutaneous side inwards, after destroying the hair follicles with X-rays or radium, and covers over the bare area with another flap of skin raised up from the sides of the wound.

F. C. Ormerod.