

EARS.

Ackland, T. D., and Ballance, C. A.—*Cerebellar Abscess, Secondary to Ear Disease, illustrated by a Case successfully Treated by Operation, with Remarks on Diagnosis, and with a Table of Published Cases.* St. Thomas's Hospital Reports, Vol. XXIII., 1894.

THE patient, a boy fifteen years old, had suffered from right-sided otorrhoea since the age of six and a half. Five weeks previous to admission, on May 11th, 1894, he had suffered from severe vertical and frontal headache of sudden onset. The pain was constant, and he complained that his legs and feet gave way and he occasionally fell. Two weeks before admission he had to give up work, the headache becoming worse, and giddiness even when lying down now set in. The latter became so severe that he had to close his eyes to stop it. Four days before admission he noticed objects seemed to rotate from right to left, and he himself seemed to turn the opposite way. Vertigo now became extreme, as did the headache. Vomiting set in, and the eyes oscillated.

On admission. In addition to the above symptoms both eyes deviated to the left, and the right only moved to the mid-line when turning to the right, and horizontal nystagmus. The right membrana tympani was destroyed, and the watch was not heard on contact on that side. Obvious loss of power in right upper arm, slight loss of power in right leg. Right knee jerk more brisk than left. Pulse 56, temp. 96.2. No retraction of head. On May 11th (day of admission) an abscess was opened in the anterior part of the lateral lobe of the right side of the cerebellum. On the 12th the pulse rose to 84 and temperature to normal.

Symptoms, however, recurred. This was, however, due to blood clot in the posterior part of the lateral lobe, the removal of which was necessary again on May 30th. The boy returned to work on November 15th.

Thirty to forty per cent. of all brain abscesses are otitic. In twenty-six cases at St. Thomas's there were nine temporo-sphenoidal and nineteen cerebellar. At Great Ormond Street two temporo-sphenoidal and four cerebellar. The authors quote headache, vertigo, photophobia and purposeless vomiting, optic neuritis, low temperature, slow pulse and respiration, drowsiness, foul breath and constipation, loss of control of bladder, emaciation, pallor and loss of expression of countenance; and as localizing symptoms, *paralysis of the anterior extremity on the same side as the cerebellar lesion, associated with weakness of the lower extremities, increased knee jerk on the same side as the lesion, and conjugate deviation of the eyes away from the lesion.* The various explanations of this hitherto offered are not deemed satisfactory. Muscular rigidity or convulsions may affect the limbs on the same side as the lesion. A tendency to rotation of the face to the side of the lesion in walking. Staggering or cerebellar gait, and a tendency to fall towards the side opposite the lesion. A tendency to lie coiled up in bed on the side opposite the lesion. No loss of sensation. The localizing symptoms of temporo-sphenoidal abscess are enumerated and discussed.

And the following points in differential diagnosis are pointed out:—(1) The patient tends to lie on the side of the lesion in temporo-sphenoidal lesion. (2) Frequent depression of lower jaw. (3) Tenderness on palpation is not necessarily that of abscess. (4) Differential percussion note is not reliable. (5) Disease of the bone in the attic or posterior fossa indicates the direction in which to search. (6) McBride's sign also not certain.

Diagnoses in complicated cases, and from tubercular meningitis, are discussed.

as is brain abscess, not of otitic origin, in a patient suffering from otitis. The treatment is carefully dealt with, and this classical article concludes with a synopsis of one hundred, and a table of seventy-nine cases, and a complete bibliography.

R. Lake.

Bevan, A. D.—*Mastoid Diseases.* "Journ. Amer. Med. Assoc.," April 11, 1896.

AFTER making a large number of operations on the cadaver, he lays down some landmarks in mastoid surgery. The simple anatomical fact must be kept in mind that the facial nerve lies in a plate of bone between the external auditory canal and an opening directly into the antrum. If this plate is chiselled away, as is recommended by some text-books, the nerve will certainly be injured.

Oscar Dodd.

Bezold, T. (Munich).—*A Further Case of Anchylosis of the Stapes Diagnosed in Life, with Autopsy and Manometric and Histological Examinations.* "Arch. of Otol.," Vol. XXV., No. 1.

THE patient, aged twenty-four, had been hard of hearing for seventeen years, with continuous tinnitus. There was a family tendency to deafness. The appearances of the membrane were insignificant. Whispered voice was heard in the right ear at six centimètres, and in the left at twenty-five centimètres. Fork A on the vertex was heard best in the left (better) ear. Rinné with A, both sides negative, and with A' shortened. The lower tone limit showed loss of hearing for tones below F—t. The diagnosis was sclerosis, with anchylosis of the stapes. Similar conditions were found in the patient's younger brother. The elder one died five years later, and on *post-mortem* examination the stapes were found to be completely immovable both to the probe and the manometer. On histological examination there was found to be a deposit of spongy bone around the pelvis ovalis of both ears. The cochlea and remainder of the labyrinth appeared to be normal. This is the fifth case in which a diagnosis of anchylosis of the stapes, founded upon lengthened bone-conduction for low tones, marked negative Rinné, and extensive defect for air conduction at the lower end of the scale, has been verified by *post-mortem* examination.

Dundas Grant.

Braislin, W. C. (Brooklyn).—*A Case of Living Larvæ in the Ear without Previous Suppuration.* "Arch. of Otol.," Vol. XXV., No. 1.

INSPECTION of the interior of the meatus revealed, in the midst of fragments of exfoliated epithelium, a small white object with curious "vibrio movements." The case was exceptional, inasmuch as there was no foetid pus to attract the parent insect to the ear. The patient, however, suffered from foetid atrophic rhinitis.

Dundas Grant.

Couetoux.—*Dressings in Chronic Purulent Median Otitis.* "Ann. des Mal. de l'Oreille," Oct., 1895.

ALCOHOL dressings have a clearly determined action, causing retraction of a swollen meatus, and favouring emptying of the tympanum when this is deprived of communication with the exterior. It is especially when there is this swelling of the meatus that it is so excellent. The author heats it to 95° above a lamp. When the liquid is quite hot, but supportable to the finger, it is carefully dropped into the ear. It is far superior to boracic acid. Though quite tolerable to the patient, if there is any pain this is dissipated by the application of heat to the external ear. It is equally beneficial in infants and old people. Boracic acid may be added to the alcohol and heated up with it until it commences to carbonize, and a dressing

may be dipped in it and passed through a flame (Lermoyez, Du Fougeray); or it may be applied not quite dry, when it is less antiseptic, and it is also colder, and external heat should be applied, or hot alcohol at 95° may be introduced. The country practitioner will find a small wad of fine linen wrapped round a knitting needle, soaked in brandy and burnt in a flame, a serviceable application for introduction into the ear.

R. Norris Wolfenden.

Courtade.—*Case of Occlusion of the Auditory Meatus: Operation.* “*Ann. des Mal. de l’Oreille,*” Dec., 1895.

THE case of a child, five and a half years of age, who had suffered an injury to the right ear by forceps at birth, from which abscess resulted and closure of the meatus. Three operations at different periods failed to render the canal patent. In October, 1894, the author succeeded in restoring the meatus, which had ended in a *cul de sac* fifteen millimètres inside the tragus. The author describes his method of treatment of membranous occlusions, believing that simple dilatation is useless in most cases, except as a preliminary to surgical measures. When the adhesion is extensive he prefers the bistoury to the galvano-cautery. *R. Norris Wolfenden.*

Knapp, H. (New York).—*Further Observations on the Indications for Mastoid Operations in Acute Purulent Otitis Media and its Complications.* “*Arch. of Otol.,*” Vol. XXV., No. 1.

THE first case was one of acute purulent otitis media with mastoid involvement and glandular swelling. Temporary improvement took place under the use of the Leiter coil, but recurrence soon followed, with complete facial paralysis. On operation the antrum was found empty, but a probe passed through the tip into the digastric fossa. The internal jugular vein was exposed and the lateral sinus was injured, but the hæmorrhage was easily stopped, and rapid subsidence of the facial paralysis and of all the symptoms took place. The facial nerve was probably affected in the lowest part of its course, and the suppurative inflammation was particularly marked in the numerous air cells surrounding this.

In the second case there were marked cerebral symptoms, and the relief following paracentesis of the drum membrane was only slight and temporary. On recurrence of the symptoms, alleviation for a time followed the use of the cold coil, but operation had to be performed on the mastoid process, and much soft cancellous bone was found and removed with a sharp spoon. The bottom of the cavity felt quite soft; and although fluctuating improvement was effected for some days, nausea, vertigo, and chilliness set in, and further operation was undertaken for the exposure of the sigmoid sinus, it being concluded that some focus of suppuration had not yet been reached. The sinus was exposed to the extent of two centimètres and was found to pulsate normally. The wound in the bone was then enlarged upward and forward, so as to expose a small circle of dura mater at the base of the middle cranial fossa. No pus was found there; the dura mater was normal and pulsated regularly. For four days the patient improved, but the pain returned, with chilliness, nausea, and weakness; and the wound was again explored, and in every direction where the bone was soft, specially towards the tip of the mastoid process, where there was diminished resistance, towards the lower surface, curetting was thoroughly carried out. From this time the patient steadily improved. From this case Dr. Knapp draws the following rule for guidance—that “as long as there are grave and protracted symptoms of middle ear disease we have to seek for their anatomical cause, in doing which exploratory openings of the cranial cavity are legitimate, because they are practically harmless, and sometimes may save the patient’s life.”

Dundas Grant.

Laurens.—*Anæsthesia by Guaiacol Oil in Otology, Rhinology, and Laryngology.*

“*Ann. des Mal. de l’Oreille*,” Jan., 1896.

THE solution is made by purifying olive oil with chloride of zinc, then washing with alcohol (to get rid of albumens, resins, and fatty acids), and maintaining for some time at 100 degrees. The solution to be used is twenty per cent. Two cubic centimètres used for the ear have been quite as efficient as cocaine. The application to the nose should be made by strong frictions and by a tampon. In fifteen to twenty minutes anæsthesia is produced. Possessing no astringent effect, it is not so good in the nose as cocaine. It has been useful in the pharynx. Both in the nose and throat the time necessary to obtain analgesia is much greater than with cocaine. In the ear this is less noticeable. It has also the disadvantage of forming a white emulsion with nasal secretions, which must be removed before operation.

R. Norris Wolfenden.

Luc.—*Contributions à l’étude des Mastoïdites de Bezold.* “*Arch. Inter. Laryng., Otol., et Rhinol.*,” Jan. and Feb., 1896.

THE author, after dealing with all the cases (nineteen in number) of this complication hitherto recorded, proceeds to describe a twentieth example. The patient, a man of sixty-six, came complaining of abundant suppuration in the right ear of two and a half months’ duration. There was swelling of the right side of the neck, which, according to the patient’s account, had extended secondarily to the retro-auricular region. The author considered the cervical swelling to be due to simple extension of œdema. The original cause of the otitis was found in ulcerating gummata of the naso-pharynx. Antisyphilitics were prescribed, and without delay the mastoid antrum was opened in the usual manner. The cavity was found to reach almost to the point of the mastoid. One of the assistants noticed during the process of packing that pus seemed to continue to flow from the lower part of the antrum.

Three days after operation the cervical swelling had increased in size, causing manifest prominence of the sterno-mastoid, and the least pressure over the swelling produced a gush of pus from the bottom of the antrum. The wound was necrotic in parts, and analysis of the urine proved the patient to be diabetic. The author now recognized the case to be one of Bezold’s mastoiditis, and on examination found a perforation on the inner wall of the apophysis in the situation of the digastric groove, through which pus had made its way down under the sterno-mastoid and along the sheath of the great vessels. A second operation was immediately undertaken, and the whole of the apophysis was resected with the gouge and Major’s cutting forceps. In order to obtain drainage by a counter-opening, the author, having failed to pass a probe from above downwards as guide, dissected down on to the sheath of the vessels, at a point four centimètres below the angle of the jaw. The sheath, which was of a yellowish colour, was opened, with immediate escape of pus. A drain tube was carried up along the sheath to the upper wound, and the whole was packed. The patient, a diabetic as stated, died on the fourth day.

The author, after drawing attention to the causes of error in his own case, gives a general essay of the most interesting and important character, and of which the main points only are dealt with here.

The peculiar etiological element essential for the production of this rare complication is pronounced development of the mastoid cells which closely approach the internal surface of the apophysis. The accident is consequently never observed in children, while a notable proportion of recorded cases are among those past fifty, in whom rarefaction has probably played a part. Suppuration localized in the cells may give rise to the complication, which appears in nearly all cases to be

part of acute or sub-acute disease. Pus, having penetrated the internal wall and reached the digastric groove, may either pass backwards under the sterno-mastoid, and eventually reach the muscles of the neck, and even the cervical vertebrae, or it may travel downwards and forwards in the sheath of the vessels, and ultimately present as a lateral pharyngeal abscess. Although the condition complicates acute or sub-acute mastoid disease, its effects are essentially slow and insidious.

The otorrhœa of many weeks' standing may indeed have ceased, or no otorrhœa may have occurred at all; the patient complains of slight pain, not accompanied with fever, and a fulness is noticed behind the angle of the jaw; the upper part of the sterno-mastoid becomes raised by an underlying, firm, non-fluctuating swelling, limited above by the base of the skull. Pressure on this swelling may or may not produce a flow of pus from the ear or the open mastoid. Later, fluctuation is to be detected behind or in front of the sterno-mastoid, or in the pharynx. In no case has pus reached the mediastinum. The swelling may be mistaken for an adenitis or simple œdema. Non-perforation of the external wall of the mastoid is an aid to diagnosis, but the pathognomonic sign is the flowing of pus from the bottom of the opened mastoid antrum on pressure being applied over the cervical swelling.

The complication, particularly on account of its insidious course, must be considered a serious one, and intracranial suppuration is not rare, owing no doubt to the difficulty of discharge into the deep structures of the neck.

With regard to operation, the author is of opinion that in view of the difficulty of obtaining free access to the upper end of the cervical abscess, it will be well in all cases to resect the whole of the apophysis which projects below the base of the skull; a proceeding which is free from difficulty if the sterno-mastoid is first thoroughly detached. A counter-opening should be made at the most dependent point by dissection from without, and not through the pharynx, where asepsis is impossible. No appreciable impairment of the function of the sterno-mastoid muscle need be feared.

Ernest Waggett.

Schwager (Kaiserslanterne).—*A Case of Objective (Perceptible?) Noise in the Ear.* "Monats. für Ohrenheilk.," Feb., 1896.

THIS was a peculiar clicking sound, which could be heard about as far as twenty centimètres from the patient's left ear. It was irregular in rhythm, and its frequency was about one hundred and twenty to the minute. Isochronously with the noise the soft palate and uvula rose and fell, and the patient could by an effort check the noise and reproduce it. It was obviously a case of clonic spasm of the tensor palati muscle, through the action of which the walls of the tube were detached from each other. The condition came on about four years previously, after an accident which led to her lying unconscious with her head in a brook for some time.

Dundas Grant.

Urban, Pritchard (London).—*The Treatment of Polypi and Granulations.* "Arch. of Otol.," Vol. XXV., No. 1.

THE ear is disinfected by syringing with 1 in 40 warm solution of carbolic acid for three or four days. On the morning of the operation the auricle and cartilaginous meatus are purified with a 1 in 20 solution of carbolic acid; the deeper meatus and middle ear are syringed with the 1 in 40 solution, followed by an instillation of the same strength, or of 1 in 20 if the ear will tolerate it. After ten minutes or a quarter of an hour the drops are allowed to run out, the cartilaginous meatus is lightly plugged, and the auricle is covered with double cyanide gauze, wrung out in 1 in 20 carbolic acid. All antiseptic precautions as regards instruments, fingers, etc., are attended to, the blood and *débbris* are syringed out

with 1 in 40 carbolic acid after the operation, and a light plug of double cyanide gauze is inserted, after being wrung out in a 1 in 40 carbolic solution. Finally a dressing and bandage are applied. Very few changes of dressing are required, and the author points out that in these highly septic cases mere aseptic treatment is valueless.

Dundas Grant.

Urquhart, R. A. (Baltimore).—*Two Cases of Abscess in the Mastoid Region, associated with Diabetes Mellitus.* "Med. News," March 21, 1896.

THE author draws attention to the fact that inflammation of the mastoid is very frequent in diabetes mellitus. The first case mentioned is one of a female, aged fifty-seven, in fairly good condition, who had suffered from diabetes for seven years, following an eruption of boils in the face, pain was complained of in the right ear. On examination the membrana tympani was seen to be congested and the external meatus swollen, especially along its posterior wall; this was rapidly followed by purulent discharge from an existing perforation in the posterior inferior quadrant, accompanied by great tenderness over the mastoid. The case yielded to boric lotion and hot applications. In the second case the patient, also a female, aged sixty-seven, was poorly nourished, the mastoid was primarily affected, the inflammatory process developing slowly but steadily; pain was experienced on deep pressure only. The membrana tympani never showed more than a mild congestion. On incision through the periosteum the bone appeared to be unhealthy and the periosteum was diseased. The author remarks that possibly, judging by the long period of the purulent discharge kept up, there was something more than a simple periostitis.

St George Reid.

Von Stein (St. Petersburg).—*On the Disturbances of Equilibrium in Diseases of the Ear.* "Arch. of Otol.," Vol. XXV., No. 1.

THE writer agrees with Goltz and Brener that in the labyrinth there is a special anatomical apparatus which by reflex action serves to maintain equilibrium—namely, during motion the semicircular canals (dynamic), and during rest the utricle and saccule (static).

The subjects were tested, as regards their static muscular energy—

1. By standing with the legs approximated and the knees stiff.
2. Standing partly on the toes and partly on the soles of the feet, with the legs close together.
3. Standing on one foot alone.
4. Standing on a descending plane with closed legs and stiff knees.

As regards the dynamic muscular energy—

1. Walking straight on a level floor forward or backward.
2. Jumping.
3. Hopping on one leg.
4. Rotation on the vertical axis of the body to the right or left with the legs close together.
5. Rotation on one leg.

By comparing the behaviour of normal subjects and of those with diseased ears he came to the conclusion that static disturbances suggest affections of the utricle and saccule; dynamic (with nystagmus), disease of the ampullar system. From prognostic point of view he formed the opinion that the more severe the disturbances of equilibrium were in a peripheral disease of the ear, with simultaneous loss of hearing, the less hope there was of restoration. He describes several typical cases, and draws attention to the medico-legal importance of these observations, the serious disturbance of equilibrium being an element

of importance in judging of claims for damages in cases of railway or other injuries.
Dundas Grant.

Walker, Downie (Glasgow).—*A Case of Acquired Total Deafness, the result of Inherited Syphilis, with Post-Mortem.* "Arch. of Otol.," Vol. XXV., No. 1.

A TYPICAL case as regards personal and family history and functional examination. The base of the stapes was incorporated with, or ossified to, the border of the foramen ovale. The mastoid bone was solid. The outer part of the internal auditory meatus was much narrowed, and at its outermost part almost completely obliterated, as was also the vestibule. In the cochlea the modiolus and lamina spiralis ossis were unusually thickened, and of the semicircular canals only a trace of the external one could be found.
Dundas Grant.

Wilkin, G. C.—*Aural Polypi: their Symptoms, Diagnosis, and Treatment.* "Clin. Journ.," March 25, 1896.

THE author speaks favourably of parenchymatous injections of pyoktanin in malignant aural polypi, which he has employed in two cases. *Middlemass Hunt.*

MOLL'S TREATMENT OF ACUTE DISEASES OF THE ACCESSORY CAVITIES OF THE NOSE BY RESPIRATORY ASPIRATION.

Contributed by DR. DUNDAS GRANT.

IN the proceedings of the last annual assembly of the Dutch Society of Laryngology, Rhinology, and Otology, Dr. Moll, of Arnheim, contributed a description of a new simple and apparently very successful method of relieving, and even curing, the affections above described. In a few words, it consists in aspiration of the contents of these cavities by means of a forcible inspiration while the nose and mouth are firmly closed. In this way no air can be drawn into the chest, and there is a considerable lowering of pressure on the contents of these cavities. The fluid in them is thus drawn out to a greater or less extent, as was proved in Dr. Moll's cases by the appearance of pus in the nasal cavities, although it had been completely removed before the carrying out of the method. Furthermore, in a case in which an alveolar puncture had been already made, a manometer indicated a fall to the extent of fifteen millimètres of mercury during the forced inspiration. In a very illustrative case the patient carried out the process every two hours. She obtained immediate relief from the characteristic discomfort, and in a few days was perfectly well. In the last few lines of the abstract of his communication the interesting secret emerges that he was in his own person a sufferer from this affection. Necessity was possibly the mother of invention, and the relief which he himself experienced has doubtless been the cause of his discovering a method which certainly appeals to common sense, and which recommends itself on account of its simplicity.