

Tsakyroglous, Dr. (Smyrna).—*A Case of Leech in the Larynx.* "Monatsschrift für Ohrenheilkunde," January, 1900.

Spitting of blood and dyspnœa were complained of. The leech (*Hirudo sanguisuga*) was seen to have fastened on the base of the epiglottis, and lay on the ventricular bands. It was removed with forceps. The patient had drunk from a suspicious spring in the neighbourhood of Esme a week previously, and thought he had swallowed a leech. This species is frequently found in the throats of horses and cattle.

William Lamb.

Zuckerkindl, Professor E.—*Notes on the Larynx of a Singer.* "Monatsschrift für Ohrenheilkunde," January, 1900.

The glottis was long and narrow, the cricoid cartilage very slender; thus, adduction would be easy. There was a strongly-developed superficial layer of the crico-thyro-arytenoideus, connected with the arytenoideus proper. The fibres of the thyro-arytenoideus which go to the epiglottis and to the ary-epiglottic folds were so strongly developed that when contracted the walls of the upper segment of the larynx must have been thrown into a condition of tension favourable to resonance. The muscles of the cords were also large, and, in fact, there was generally increased muscular development to meet increased work.

William Lamb.

E A R.

Bezold, F. (Munich).—*Re-examination of the Hearing of Deaf-mutes originally tested in 1893.* "Arch. of Otol.," vol. xxix., Nos. 2 and 3.

The re-examination was carried out by means of more powerful instruments devised by Professor Edelmann. Only twenty-eight of the scholars previously examined now remained, but Professor Bezold found his former observations very closely confirmed, the "islands" of hearing being in some instances slightly more marked than when the older instruments were used, and some formerly taken to be quite deaf were found to have limited areas of audition. Professor Bezold expresses disappointment with the result of hearing exercises by means of tones, but in his Group VI. (inability to learn to speak, but with a very wide range of audition for sounds) he considers cultivation of the ear by speech very promising. The paper is illustrated by graphic charts.

Dundas Grant.

Bezold.—*Three Cases of Intracranial Complications of Acute Otitis Media.* "Munch. Med. Wochen.," No. 22, 1900.

In a case of acute purulent otitis media during the fourth week, sinus phlebitis developed, followed by metastatic deposits in the lung. The jugular vein was tied and the sinus cleared out. Recovery followed.

In another case, as the result of acute non-perforative otitis media, an abscess developed in the posterior part of the temporo-sphenoidal lobe. The abscess was opened and drained. Recovery took place.

W. Milligan.

Biche, Dr. Carl.—*Report of the Ear and Throat Department of Military Hospital No I., Vienna, for the Year 1898-99.* "Monatschrift für Ohrenheilkunde," February, 1900.

Otitis externa was treated by packing a strip of gauze soaked in alcohol into the meatus. Ichthyol and menthol vasogen were also used; the latter gave great relief to pain.

Acute otitis media was treated by the dry method. If after three or four weeks' careful treatment the discharge did not diminish, the mastoid was opened. The bone was generally softened and the antrum full of pus.

Chronic otitis was also treated by the dry method wherever possible. Where washing out was necessary alcoholic liquids were used.

William Lamb.

Biggs, G. P.—*Cerebellar Abscess; Rupture into the Fourth Ventricle.* "Medical Record," February 16, 1901.

The patient, a male, aged forty-one, had had bilateral suppurative otitis media since twelve years of age. Eleven days before admission to hospital he had severe pain in the back of the head, with vomiting and partial paralysis of the right side of the face. The tongue deviated to the left. The left pupil was larger than the right, but both reacted to light. The neck was rigid and tender. There was also nystagmus and conjunctivitis of the right eye. Death occurred three weeks after the onset of acute symptoms. At the autopsy basal meningitis was found, extending partially also over the right cerebellar lobe. The seventh and eighth cranial nerves were softened and bathed in a purulent exudate. The lateral and also the third ventricles were distended with sero-purulent fluid. In the fourth ventricle some offensive pus was found, and a mass of necrotic tissue, which had originated in an abscess of the right cerebellar lobe close to the pons, and which communicated with the fourth ventricle by means of a small perforation in its anterior part. This opening, smooth and rounded, suggested a process of some considerable duration.

W. Milligan.

Ricardo Botey.—*The Surgical Treatment of Sclerosing Otitis.* "Annales des Maladies de l'Oreille, etc.," August, 1900.

This author is convinced that sclerosis is a tropho-neurosis. The lesions are disseminated mostly in a capricious manner, and are rarely confined to the middle-ear. He considers that sclerosis is rather a *panotitis*, and, holding these views, he is not very much in favour of surgical treatment in these cases. Nevertheless, he has tried several surgical procedures, namely:

1. Perforation of the membrane.
2. Mobilization of the stapes.
3. Removal of the malleus, incus and membrane.
4. Deep mobilization of the stapes, after section of all adhesions between its crura and the fossula ovalis.
5. Ablation of the stapes.

Before attempting any of these operations, it is necessary to ascertain the integrity of the internal ear.

The author goes into the detail of these operations, and has arrived at the following conclusions:

1. In sclerosis, to justify the trial of any surgical treatment, bone conduction must be perfect, with Rinné negative, and Weber referred

to the worst side. Perforation of the membrane should cause improvement.

2. Permanent perforation of the membrane can be performed when the meatus is narrow, but in spite of the fact that a slight improvement is sometimes obtained for about two years, and supposing that adhesions and diaphragms are destroyed, the patient will revert to the same deafness that he suffered from before the operation.

3. Mobilization of the stapes is completely useless, as any benefit is always transitory. This operation is only justified in cases following suppuration. The same may be said of the improvement obtained after the breaking down of adhesions of the stapes.

4. Extraction of the malleus, incus, and removal of the membrane can be perfectly effected *via* the meatus, when it is large. The results obtained in sclerosis are mediocre or insignificant. The remote effects are nearly negative, and they may aggravate the deafness.

5. Deep mobilization of the stapes can be done without performing Stacke's operation. The results are always very slight, and rarely definite.

6. Extraction of the stapes, despite the great hopes entertained for it, is a bad operation. Results are almost nil.

7. In the surgical treatment of sclerosis, otology has made a false move, because the disease is probably a tropho-neurosis, and the lesions are mostly panotitic. Therefore any operation which aims at modifying the transmission of sounds to the labyrinth cannot affect the latter, which is almost certainly implicated, if not diseased alone.

8. Experiments on animals, which the author has attempted, are wholly inapplicable to man, as in the former the labyrinth is intact, and in the latter it is always more or less affected, although we, with our imperfect methods of investigation, cannot always detect it.

9. Similar experiments undertaken by the author on animals in 1890, and repeated in 1896, proved the inefficacy of surgical treatment in sclerosis, since by irritating the surroundings of the fenestra ovalis, the foot-plate of the stapes became completely ossified, welded to the window, and limited by thickening and ossification of the niche, consecutive to the spread of an interstitial inflammation of the mucous membrane.

10. Since it is fairly certain that sclerosing otitis is a tropho-neurosis, with the formation of bony substance, principally in the labyrinthine capsule, about the fenestra ovalis, in the cochlear canal, and in the spirals of the cochlea, the terminations of the auditory nerve being more or less implicated, surgical treatment is useless in nearly every case.

Macleod Yearsley.

Cheatle, Geo. Lenthal.—*New Plastic Operation on the Prominent Auricle.* "Medical Press," February 13, 1901.

The patient, a boy, aged nine, complained of his prominent ears attracting a great deal of unpleasant attention; therefore he and his parents wished that something might be done, if possible, to remedy this great deformity. Mr. Cheatle for this reason performed the following operation: A crescentic-shaped portion of the auricle, measuring three-quarters of an inch in its widest part, was excised by means of two crescentic incisions, which transfixed all the tissues. The posterior incision ran along the helix just inside its curved rim, and the anterior incision was made into the auricle a quarter of an inch behind the external auditory meatus. As these two incisions met at

their extremities, on their completion the tissues included between them were necessarily removed. This left a crescentic hole in the auricle, the rim of the helix being intact, which was stitched to the anterior edge of the hole thus produced. It was requisite to excise a portion of the helix to accommodate it to this edge. It was also thought best to remove the lower part of the helix, as by so doing a prettier edge was left for the re-formed auricle. The edges of the helix and the anterior and posterior edges of the auricle were brought together by means of silkworm-gut stitches, the wound being then covered with collodion and gauze. Mr. Cheatle, on thinking over the question, has come to the conclusion that the deformity in this and similar cases is occasioned mainly by an increase in the measurement of the auricle between the external auditory meatus and the top of the helix, arising from a flattening of the antihelix; he therefore considers the measure to adopt is to excise this portion of the antihelix, practically the antihelix itself; to do this and leave a presentable ear it is necessary to preserve the rim of the helix which forms the curved posterior edge of the auricle. He proposes this procedure because the elasticity of the cartilage prevents the reduction of the prominence by any other form of plastic operation. One of the most important points to be remembered is that the curve of the anterior incision above described should be carefully fashioned to fit the curve of the helix, which is stitched to it at the end of the operation, this being specially important in order to secure afterwards a natural shape to the ear. It is also important to leave enough of the remaining auricle to allow its tip to be above its attachment to the side of the head.

During the operation the skin retracted away from the cartilage and left it prominent. This cartilage was removed with a pair of scissors to enable the edges of skin to fall together. The stitches were inserted by transfixing all tissues.

Two weeks after the operation perfect union had taken place, the stitches had all been removed, and the ear had assumed quite a natural appearance.

Jobson Horne.

Cobb, C. M. (Boston, Mass.).—*Nasal Empyema as an Etiological Factor in the Establishment and Continuation of Post-nasal Catarrh and Catarrhal Inflammation of the Middle Ear, with an Especial Consideration of the Enlargement of the Posterior End of the Middle Turbinate as a Predisposing Cause.* "Arch. of Otol.," vol. xxix., Nos. 2 and 3.

The title gives the gist of the author's contention. He considers that nasopharyngeal catarrh is only persistent when the posterior cells are involved, and that this involvement is generally preceded by an enlargement of the middle turbinated body. He holds that the sinuses have a tendency to spontaneous recovery from inflammatory conditions if the superjacent swelling of the middle turbinal and the granulations round the orifices are removed. His cases give support to these views. These observations show the importance to the aurist of a knowledge of rhinology.

Dundas Grant.

Dunn, J. (Richmond, Va.).—*A Case of Bezold's Mastoiditis secondary to Facial Erysipelas; Operation; Recurrence of the Erysipelas within Twenty-four Hours; Cure.* "Arch. of Otol.," vol. xxix., Nos. 2 and 3.

The recurrent attack subsided under the prompt and thorough use of carbolic acid and alcohol. The whole of the reddened area, including the auricle and the external auditory canal, which was nearly impervious from the swelling down to the drum membrane, was painted over three times with pure carbolic acid. The whole surface was then left covered with gauze saturated in pure alcohol, the auditory canal being filled with alcohol every two hours. *Dundas Grant.*

Gruber, Professor.—*Defect of the Lower Wall of the Bony External Meatus, the Jugular Bulb filling the Gap.* "Monatschrift für Ohrenheilkunde," January, 1900.

The gap corresponded with the posterior lower quadrant of the membrana tympani, and was about 6·7 millimetres long and 3·4 millimetres broad. It was filled by a dark, somewhat livid swelling, which bulged upwards, and showed light reflection at its point of greatest convexity. The swelling felt elastic when touched with the probe. Pressure upon the jugular vein in the neck caused it to increase, as shown by the change in the light reflection. The annulus cartilagineus was complete, the dehiscence involving only the lower wall of the meatus. *William Lamb.*

Jürgens, Dr. E. (Warsaw).—*Suppurative Diseases of the Ear: their Causes and Clinical Features.* "Monatschrift für Ohrenheilkunde," February, 1900.

Fruitless mastoid operations may be avoided in many cases by bacteriological examination of the middle ear. All cases of otorrhœa and dry perforation are so examined in the author's wards. The presence of streptococci in acute cases generally means that the mastoid will have to be opened.

Details of fourteen cases are given. They may be arranged in three groups:

1. Those in which *Streptococcus pyogenes longus* alone was present. They were characterized by continued or remittent fever, with distinct septicæmic symptoms.

2. Those in which *Streptococcus longus* and *brevis* were present together with staphylococci. The course was slow and dragging, with no stormy periods. Temperature curve low.

3. Those in which *Streptococcus brevis* (Behring) was present alone. Clinically there were stormy periods, alternating with quiet times; no distinctive symptoms. As regards the conditions found in the three classes of cases, the more dangerous the invader (*Streptococcus longus*) the less are the local changes, and the more do the general symptoms predominate. *Streptococcus brevis* often gives rise to extensive local destructive changes, with slight general symptoms. Staphylococci seem to have rather a weakening effect on the infection of streptococci, for the mixed cases are much less virulent than those in which streptococci alone are present. The latter, although they may apparently recover without operation, always break out again, and "bring the patient either to his coffin or to the operating-table." In one case a perforated membrane healed and recovery was apparently

complete, yet the patient died in less than a month from purulent meningitis. Thus the middle ear may heal and leave the mastoid process still diseased.

In two cases *Streptococcus brevis* was present in completely sclerosed mastoid processes, growing all through the bone. The actual numbers of the bacteria found in the mastoid were not very large. The author took splinters of bone from the mastoid during operation, and these yielded almost pure cultures of the organisms. Pus taken before operation most frequently yields pure cultures; pus taken after operation is apt to contain mixed organisms.

The secretion in acute cases often contains nothing but epithelium and blood corpuscles, and in such the danger is slight. Pure staphylococcus infection of the mastoid the author has not yet seen.

In older cultures of *Streptococcus brevis* the chains often drop to pieces, so that diplococci seem to be present. *William Lamb.*

Lewin, Leon.—*Investigations into the Use of Soluble Remedies introduced by the External Auditory Meatus.* "Archiv für Ohrenheilkunde," 50 Bd.

In anatomical preparations fluids were poured and syringed into the auditory meatus, not only in normal temporal bones after perforation of the tympanic membrane, but also where there had been chronic otorrhœa. The fluid, when poured into the meatus with the head in a suitable position, and if the perforation was not too small, passed easily into the tympanic cavity and the middle-ear spaces. This also occurred in otorrhœa if the secretion was small in quantity or had been previously removed. The supposition that the middle-ear spaces cannot be reached in conservative treatment is therefore false. The same result occurred on syringing, except where there was excessive discharge.

Only when there is a large perforation and a tube is passed into the tympanic cavity can this and the neighbouring spaces be cleansed in cases with profuse suppuration. If one syringes not only from the external meatus, but also from the tube, the cleansing takes place easier and under more favourable conditions.

This superior method of syringing *per tubam* which was derived from the researches of Lewin, may suffice for cases of middle-ear suppuration with central perforation, but certainly not for the by far most dangerous suppurations with peripheral perforation high up, where syringing with the tympanic cannula is required. *Guild.*

McCaw, J. F.—*Extradural Abscess following Acute Suppurative Tympano-Mastoiditis, with Report of Two Cases.* "Laryngoscope," February, 1901.

In the first case the patient, a male, aged fourteen years, developed an attack of acute middle-ear suppuration following influenza. Under general anæsthesia the membrane was perforated, followed by a free discharge of pus. Improvement followed at first, but within a few days the temperature began to rise, accompanied at the same time by mastoid tenderness, but by no swelling or redness. The mastoid cells were opened and cleansed. On the eighth day following this he complained of pain and stiffness in the muscles of the neck, accompanied by an evening rise of temperature and by restlessness and delirium. There was no optic neuritis. Under chloroform the interior of the cranium was explored, the surface of the cerebellum being first

examined, with negative results. A small epidural collection of pus was found over the tegmen antri. The patient gradually recovered.

In the second case the patient was a male, aged nineteen, who suffered from acute suppurative otitis media following an attack of influenza. Profuse discharge existed, and there was also slight mastoid tenderness. The mastoid cells were opened, and were found in an acute carious condition. The inner mastoid cortex had entirely disappeared, exposing the lateral sinus, which was bathed in pus and necrotic tissue. The patient made a good recovery. *W. Milligan.*

Mink.—*On the Form of the Catheter.* "Annal. des Mal. de l'Or.," December, 1900.

The author dwells on the inconvenience of the ordinary catheter where septal deformities are present, and of the necessity of suiting the curve of such catheters to particular cases by repeated trial. He proves on grounds both anatomical and mathematical that all this can be avoided by slightly curving the shaft of the instrument, which terminates in a sharply-bent terminal portion, not longer than $\frac{3}{4}$ of a centimetre, which enters the Eustachian tube. The curve of the shaft which the author finds useful in all cases over twelve years of age is part of a circle of $12\frac{1}{2}$ centimetre radius with a chord of 7 centimetres. The tip of the instrument is brought into position by leverage on the septum or its excrescence, and the curved form is introduced on the grounds that the end of a curved lever can be made to traverse a greater arc than a straight one by successive displacement of the fulcrum. As a practical consequence, the tip of the catheter can be carried by leverage into the Eustachian orifice, even when a spur is present near the posterior end of the septum. *Ernest Waggett.*

Murray, W. R. (Minneapolis).—*Facial Paralysis as a Complication of Acute Otitis Media.* "Arch. of Otol.," vol. xxix., No. 1.

Out of 258 cases two were complicated with facial paralysis. The first resulted from a kick, which produced rupture of the tympanic membrane. The paralysis disappeared in six weeks, tonic treatment with antiseptics to the ear and faradism to the muscles having been practised.

In the second case, the facial paralysis supervened in a case of acute otitis soon after the occurrence of earache and before the rupture of the membrane. Treatment by means of antiseptics, tonics, and faradism was successful.

The author thinks the lesion was probably situated on the inner wall of the tympanum, above the fenestra ovalis.

(No mention is made of the sense of taste.—D. G.)

Dundas Grant.

Murphy, J. W.—*Acute Mastoiditis following Infectious Diseases.* "Columbus Medical Journal," vol. xxiv., No. 7.

The author strongly approves of paracentesis as a means of draining the tympanic cavity. He disapproves of poultices, and considers that antiseptic irrigations have little effect in controlling the progress of the disease.

If local treatment should not check the disease within thirty-six hours, he recommends opening the mastoid cells by performing Schwartze's operation.

W. Milligan.

Stenzer.—*Function of the Semicircular Canals.* "Archiv. für Ohrenheilkunde," Bd. 1., Heft 1 and 2.

Report of eight cases of operation with injury of the horizontal semicircular canal. There resulted severe giddiness, nystagmus, and subjective auditory sensations, which disappeared some months later. These did not occur in children. The uncontrollable movements which occur in experiments on animals were absent. Vomiting was of little account. Giddiness due to the semicircular canals is distinctly different from that due to brain affections. *Guild.*

Taptas (Constantinople).—*A Case of Perisinusal Abscess following Acute Purulent Otitis.* "Ann. des Mal. de l'O.," etc., xxvii., February 2, 1901.

The disease occurred in a girl, aged nineteen years, in whom an acute otitis had been cured two months and a half. A mastoid operation was performed, and a very little pus was found under the skin close to the posterior border of the bone. The antrum was healthy. At the point where the pus was found the dura mater was bare, the orifice was enlarged, and pus followed. The dura mater and the sinus were covered with large granulations, which were curetted and dressed with iodoform gauze. The patient recovered, with normal hearing in a month. The only symptoms of note were pain confined to the mastoid and headache, there being no manifestations pointing to intracranial disease. *Macleod Yearsley.*

Waring, H. J.—*Cholesteatoma of the Temporal Bone and its Treatment.* "Edin. Med. Journ.," February, 1901.

Two cases of cholesteatoma of the temporal bone—the one primary, the other secondary—are here reported.

CASE 1.—A healthy-looking woman, aged twenty-two, who had been deaf on the left side for some time, had been treated for a painful, fluctuating swelling behind the left ear by simple incision. A quantity of pus was evacuated. Three weeks later the patient came under the observation of the author. A fistula behind the left auricle leading down to cario-necrotic bone was found, but the membrana tympani was intact. A radical operation was performed. The bone was to a large extent occupied by a cavity two inches by one inch and a quarter, filled with tissue, which, on histological examination, proved to be typical cholesteatoma. This cavity extended forward into the tympanum, but did not open either the cerebral or the cerebellar fossa. The whole cavity, including the tympanum, was thoroughly scraped, then treated for several weeks by antiseptic irrigation and packing. The walls of the cavity became lined with red granulations, and a purulent discharge began to appear in the external meatus. When the cavity became stationary in size and had been sterile for some time, a second operation was done to close the post-auricular wound.

The wound was opened up, the cavity carefully dried, and the whole space filled with long, thin strips of bone and cartilage, taken from the femora and tibiæ of a young kitten, killed for the purpose during the course of the operation. The external wound was then closed with sutures and the meatus plugged with gauze. Except for a foul-smelling, non-septic discharge from the meatus from the fifth to the ninth days, nothing of importance occurred. The patient left hospital a fortnight later, with the post-auricular wound quite healed

and with practically no discharge from the meatus. The hearing was slightly improved on the affected side. The patient remained well up to the time when she was last seen, viz., two years after date of operation.

CASE 2.—A girl, ten years old, had persistent purulent discharge from the right meatus for two years. An operation, the nature of which could not be exactly made out, had been performed at another hospital. There was purulent discharge from the right meatus, the deeper part of the meatus was full of polypoid growth, and there was a depressed scar over the right mastoid. The patient was anæsthetized, and the ear carefully examined. A vascular tumour was found filling the tympanum and extending backwards towards the antrum. This was removed with a Volkmann's spoon, and the walls, which were carious, were curetted. The cavity was irrigated and packed twice a day for several weeks. The cavity diminished in size and discharge almost ceased. The patient was discharged. The tumour consisted of vascular tissue covered with a large amount of stratified squamous epithelium. A few weeks later the patient returned in much the same condition as when first seen. The second operation was now performed. The antrum and tympanic cavity were opened from behind, cleared of tumour, and the walls scraped. The post-auricular wound was left open. The cavity filled up three times with cholesteatomatous tissue before it finally was rendered aseptic. It was then freely laid open and filled with bone and cartilage, as in Case 1. The effects were not satisfactory; a purulent discharge occurred and brought away the bone and cartilage with it. Later the operation described by Mr. Ballance was performed with moderately good results.

The author considers the condition of the patient is better when the cavity is filled up with new bone than when it is left as a cavity lined with epithelium. He attributes the failure of the bone grafting in Case 2 to the fact that the cavity was probably never rendered thoroughly aseptic.

Arthur J. Hutchison.

ŒSOPHAGUS.

Downie, Walker.—*Four Cases illustrative of the Local Lesions resulting from the Swallowing of Liquid Ammonia.* "Glasgow Medical Journal," January, 1901.

The local effects of drinking liquid ammonia depend largely upon the strength of the solution. Acute inflammation usually develops immediately in those parts with which the fluid has come in contact. Within about six hours a fibrinous exudation appears, usually over the uvula, free border of palate, lip of the epiglottis, and over the arytenoid and aryepiglottic folds. Healing of these abraded surfaces takes place satisfactorily, but in the gullet cicatricial stenosis is the rule, and usually sets in in from one to three months after swallowing the ammonia. The author has usually found two strictures, one close to the mouth of the gullet and the second at a variable but usually much lower level.

Treatment by gradual dilatation, if adopted sufficiently early, is followed by satisfactory results. For the purposes of dilatation, the author uses a bulbous cylindrical gum-elastic bougie, or flattened bougie (oval in section), as in order to give permanent relief complete dilatation is necessary.

W. Milligan.