

duction, which is indeed the commonest cause of the condition, but it also frequently occurs in anæmia. Most patients believe they suffer from cold; they have a feeling of mucus or something in their throat, and a constant desire to clear the throat. On examination nothing is found, or what means much the same—a great deal—slight turbinal enlargement, septal deviation, granules on the pharyngeal wall, etc., while in the larynx irregularity of the edge of the vocal cord or a sharply defined injection.

Certain evidence that this condition is present is obtained by testing the voice, for the trained ear can detect errors in the production of the sound usually in one register; this is most marked with soft notes, least marked when singing *forte*. This can be obviated by three methods: (1) By use of faradic current during intonation; (2) by compression of the larynx; (3) by vibratory massage. The author makes use of the first method; the tone then becomes pure, and the diagnosis of phonasthenia is complete. Treatment consists in the application of the faradic current.

W. G. Porter.

E.A.R.

Herschel, Karl.—*A Case of Congenital Atresia of the Auditory Meatus in which the Auricle was Normally Developed.* "Monats. für Ohrenheilk.," Year 43, vol. iii.

Herschel has been able to find an account of only four such cases in the literature on the subject and remarks on the apparent rarity of this combination.

His patient was an old woman the offspring of blood relations, who, he incidentally states, had herself married a blood relation, and yet her children, in spite of this condition of affairs, showed no abnormalities and had good hearing.

The meatus was occluded by a plate of bone covered with skin at its outer end, in which, however, a slight depression existed at the upper and posterior angle, admitting a probe easily.

Her range for whispers was 10 cm., the lower tone limit the tuning-fork C, the upper tone limit hardly depreciated at all, whilst the function of the labyrinth is described as good. This latter condition he suggests is what is most usually found in these cases. The Eustachian tube was patent, as was evidenced by a normal sound on catheterisation.

An opportunity occurred of examining the case *post-mortem*, when it was found that the tympanic membrane was entirely absent.

After touching on the unfavourable prognosis in respect of operative attempts to remedy matters in cases of congenital atresia of the meatus, Herschel associates himself with Alexander's views to the effect that if any surgical interference is carried out it should be of the nature of a "radical operation," and he insists that a very accurate anatomical knowledge is absolutely essential to obtain a successful issue.

Alex. R. Tweedie.

Herschel, Karl.—*A Case of Cholesteatoma which Healed Spontaneously* "Monats. für Ohrenheilk.," Year 43, vol. iii.

Both this account and the one following refer to two cases which the author showed at the meeting of the specialists in throat, nose, and ear diseases from the kingdom of Saxony held at Jena, October 4, 1908.

The cure in this case occurred owing to the cholesteatoma, which lay in the mastoid process, eroding the posterior wall of the meatus and thus working its way outwards. The patient was a man, aged forty, who had

had a purulent discharge from his right ear since childhood. Fifteen years ago he was treated by a specialist, who reported that he removed polypi and granulations and also some "white skin," which latter was washed out during irrigation. The radical operation was declined. Six years ago he had come under the care of the author, who made the following notes on his condition: He had never had any pain in the affected ear or headache. The tympanic membrane and ossicles were entirely lacking. A large opening was easily seen in the posterior wall of the meatus, through which one could explore a cavity the size of a small cherry in the mastoid process with a probe. This was filled with fetid pus, which was syringed out together with a cholesteatoma, and the cavity, after an uneventful treatment, completely healed.

Herschel has been able to collect accounts of only seven similar cases, and would suggest as a reason that in these cases the destructive action of the cholesteatoma on the posterior wall of the meatus rather than in other directions, as is most common, is merely accidental. Such a sequence of events, however, corresponds with the object and method of the radical operation adopted by Stacke, and after drawing attention to the advantage of imitating Nature's efforts he concludes with the quotation: "*Naturam si sequemur ducem, nunquam aberrabimus.*"

Alex. R. Tweedie.

Bondy, Gustave.—*The Origin of Tubercle of the Middle Ear.* "Monatschr. f. Ohrenheilk.," Year 43, vol. i.

The author commences by stating that the middle ear may become the seat of tubercular processes by two routes—either by carriage of the infection along the Eustachian tube or by extension of the disease in the tissues forming its walls from the nose.

After a historical *resumé* of the work done, to determine the pathology of this condition, by such observers as Habermann, Barnick, and Gradenigo, an account is given in detail of a woman, aged thirty-four, with lupus of the point of the nose, who had had a discharge from the left ear for two years, which had not been preceded by any pain or earache. Her condition, both local and general, was such as to demand immediate operation, and the middle ear was freely exposed. Nothing abnormal was found in the posterior or middle cranial fossæ, and the sinus was not involved, but the tympanic cavity was full of exuberant granulations, and two sequestra represented its roof and anterior wall. The patient never recovered consciousness, and died on the third day after the operation.

The *post-mortem* examination revealed extensive tuberculous lesions of the nose and naso-pharynx, especially towards the left side, a large sequestrum of the body of the sphenoid and several smaller pieces of necrosed bone in its left wing around the optic foramen and in the floor of the left anterior fossa of the skull. There was also tuberculous meningitis and the lungs were seriously invaded by the same disease as well.

In order to investigate more accurately the state of the ear and Eustachian tube a large portion of the base of the skull was removed and examined separately later. An exact report of the conditions then found is given, and the author concludes with a review of the case based on the *post-mortem* findings.

He considers that the lupus of the nose was doubtless the originating lesion whence the posterior portions of the nose, naso-pharynx, and accessory sinuses became infected, and subsequently, owing to the extension of the same destructive processes into the Eustachian tube, the

middle ear became exposed to and then involved in the same infection. He, however, omits to state by which of the routes mentioned at the commencement of the article he considers the disease reached the middle ear.

Alex. R. Tweedie.

Herzfeld, J. (Berlin).—*On the Tests as to the Functional Condition of the Vestibular Apparatus.* "Monatschr. f. Ohrenheilk.," Jahrg. xlii, Ht. 12.

The effect of lesions, the author remarks, and especially the results of investigations as to the condition of the vestibular apparatus are not so obviously easy to note that they can be at once recognised. This winter he visited a deaf-mute institution in this country during the bathing hour. No one has been able, he says, to note anything remarkable in the swimming movements of these people, although amongst them were those in whom no kind of nystagmus whatever could be produced and who were completely deaf. They could not, however, as many of them asserted, swim under water (as James also states), because then they lost all idea of their position and became giddy. For purposes of an accurate account of their conditions in this respect, one must first note the effect produced by the lesions and the results of examination, as Passow has maintained. They were therefore previously carefully observed and especial attention was directed to their static capabilities. Cases of labyrinth disease or of deaf-mutism without any labyrinth affection, in whom ordinary movements produce no irregular conditions, can often be at once diagnosed if made to stand on one foot or on tiptoe, as is well known. He passed over for the present the assistance which the sense of sight affords to the maintenance of equilibrium. In order to pay still greater attention to the static sense he had carried out these tests on a spring mattress of a bed. This test recommended itself strongly to him whilst he was examining forty-four deaf-mutes in a local institution, the result of which examination he proposes to describe in a special article. Not that he discovered during these procedures results which did not correspond with those published by v. Stein; but he came to the conclusion that by this means those results were more quickly and accurately obtained in doubtful cases. In the examination of cases by the old methods the necessity of repeating the test often arose, in order to make certain that the inability to stand on one leg or on a horizontal bar was not perhaps due to mere awkwardness. The swaying from side to side of those cases in which the labyrinth is absent is, however, so characteristic when they are stood on the mattress that it is at once recognised, and more especially if the patient is instructed to walk across the mattress or stand with the feet together. If the eyes are now closed as well they lose their balance. To the same end one can make use of large air- or water-beds, or rubber shoes the soles of which can be inflated with air. A spring mattress is, however, more simple, as in every clinic such an article can be found. In the consulting room the couch will answer the purpose if the springs are not too strong.

Alex. R. Tweedie.

Freystadt, Béla (Budapest).—*A Contribution to the Subject of Caloric Nystagmus.* "Monats. für Ohrenheilk. und Laryngo.-Rhino.," Year 43, vol. v.

In this article the author gives the results of his investigations on thirty cases—twenty of which had normal hearing and ten a chronic middle-ear discharge, whilst all had a normal vestibular apparatus—

with a view to establishing the effect of repeated irrigations on the production and duration of nystagmus and also to observe the influence of aspiration on caloric nystagmus.

The account is exhaustive and includes five tables of results.

He concludes that if an interval of a quarter to half an hour is allowed to elapse between the applications of the caloric test in the case of normal ears the time of onset of the nystagmus is not appreciably affected, but that its duration may sometimes be altered, being then, however, more often decreased than lengthened. In cases affected with chronic middle-ear disease the onset of nystagmus was retarded under the same circumstances, but the duration was unaffected. Aspiration immediately after the production of caloric nystagmus in normal cases had an undoubted influence in checking this effect thus elicited, and this result was even much more obvious in those cases suffering from a chronic middle-ear discharge. From this latter observation the author suggests it may be convenient at times to aspirate an ear if irrigation with cold water has brought on giddiness, as Politzer has already advised.

Qualitatively the account of his reactions corresponds with those of other observers, but in dealing with such a transitory phenomenon as nystagmus, so occasioned, it hardly seems justifiable to allow a difference of, say, five seconds, to constitute an alteration in response to the same test, and the correct inference as to the onset and duration of nystagmus has yet to be determined. However, Freystadt has based his investigations on a method which should provide a means of eliminating inaccuracy to a very great degree, and possibly affording a uniform basis of observation in respect of the duration of nystagmus. The patient was instructed to look towards the opposite side directly the irrigation of the ear was commenced until nystagmus appeared, when he was at once told to look straight forwards. Then as soon as the nystagmus commenced with the eyes in this position the irrigation was stopped and the patient again directed to look towards the opposite side. The interval which elapsed between the onset of nystagmus with the eyes directed towards the opposite side and its cessation when the same conditions were resumed was reckoned as the period of duration of the nystagmus. He ascribes the introduction of this method to Dr. Kiproff, of Professor Urbantschitsch's clinic.

Alex. R. Tweedie.

Boot, G. W.—*Non-Suppurative Involvement of the Labyrinth in the Course of Mumps.* "Journal of the American Medical Association," December 5, 1908.

The author reports two cases and analyses these with forty-nine others collected from the literature. As a result of his analysis (which is given in a very excellent table) it is shown that there are three distinct types, according as the cochlea, semi-circular canals, or whole labyrinth are affected. He is inclined to consider the trouble to be due to an acute infection by a non-pyogenic micro-organism, probably the streptococcus described by Bein, Michaelis, and Busquet, and that it reaches the labyrinth by the blood. The paper should be read in the original.

Macleod Yearsley.