

lateral wall of the posterior ethmoid cells. This so happened in three out of thirty cases I had examined on account of the commonness of acute inflammation of the sphenoid. On this account I thought that the condition of results in the eye was as uncommon as it is believed. Now, there is a further observation which I might make, that when we do have a condition of acute inflammation of the optic nerve, it is because the posterior ethmoidal cells have replaced the sphenoid, but the nerve, instead of running at some distance from the sinus, runs along from the lateral wall.

(To be continued.)

Abstracts.

NOSE.

Submucous Resection of the Septum.—Laberua die. "Proceedings of the Parisian Society of Laryngology, Otology, and Rhinology," January 10th, 1914.

Submucous resection is, of all current operations on the septum, the most tedious and delicate. This applies to those complicated deviations of the vomero-chondro-ethmoidal variety. Whenever we intend performing Killian's operation, we are beset with inconveniences, one of which, and not the least, being the duration of the operation. Whatever may be the skill of the specialist, there is a minimum of time required to effect a satisfactory result. Including the period devoted to anæsthesia, the operation lasts about three-quarters of an hour, providing that anæsthesia and hæmostasis are as perfect as possible. This procedure is usually carried out in the sitting posture, the head being held by an assistant. But if it be true that the intervention is in many cases unattended with difficulties, we know that, with some patients, we cannot be too considerate. In nervous patients the operation is difficult, interrupted by troubles and protracted. With a view to obviating these conditions operating with the patient in the supine position has been tried. With Clar's mirror (the only one suitable in this case) the various stages of the operation are carried out as in the sitting posture. This method is applicable to all cases of submucous resection, and has been adopted with every satisfaction by Lemaitre, Lubet-Barbon, Chabert, and the author.

Inconveniences of the method :

(1) From a practical standpoint it is open to reproach, as complicating the operation ; the best methods demand simplicity. In fact, the procedure assumes the character of a major operation ; an operating table is required. The inconvenience is very slight if we limit ourselves to the special cases mentioned, without generalising the method.

(2) It is only possible to operate with a mirror of Clar's type, and therefore the electric current in some form or other is necessary.

(3) Flow of blood into the pharynx. This trouble will be easily avoided if care be taken to tampon thoroughly with a solution of adrenalin 1 in 1000.

The advantages we have observed are: No syncope, the patient is

calmer, and the head is well steadied. This method may be applied to all cases, but, restricted to those which we have mentioned, it seems to offer real advantages.

H. Clayton Fox.

Intranasal Treatment of Affections Remote from the Nose.—Emil Mayer. "Laryngoscope," 1916, p. 21.

The article deals first with headache, and second the case of a female, aged 21, who had had frontal headache for four weeks. The left middle turbinal pressed on the septum; removal resulted in cure. Nasal headaches are usually referred to an area bounded by the glabellum, the external canthus and the anterior nasal spine, though the pain may extend to the teeth, ears, and even the shoulder. In long-continued cases the general health is undermined. In making a diagnosis all the more common causes of headache should be eliminated and the condition of the eyes especially should be investigated. Shrinking of the turbinals by local applications aids in the diagnosis of nasal headache. Only as a last resort should part or the whole of the middle turbinal be removed.

Mayer recalls the work of Sluder and Jonathan Wright on the sphenoidal sinus. These investigators found that the clinical picture in chronic cases of sphenoidal sinusitis arose from narrowing of the bony canals comprising the optic and Vidian nerves. Mayer records the case of a male, aged 21, who was apparently suffering from acromegaly following old fracture of the skull. The left eye was quite blind, and there was temporal hemianopsia on the right side. X-ray examination showed the sella turcica much enlarged. The right ethmoid contained pus, and the temperature ranged from 103° F. to 105° F. Operation on the ethmoidal and sphenoidal sinuses resulted in a fall of temperature and restoration of vision.

Lastly, Mayer deals with nasal dysmenorrhœa, and claims priority in this field for his fellow American, John N. Mackenzie, who, in 1833, described genital spots on the inferior turbinal and the septum. In 1897 Fliess found that these spots swell during menstruation, and that the application of 20 per cent. cocaine relieved the pain of dysmenorrhœa. According to Mayer the inner part of the inferior turbinal and the tubercle of the septum form the genital spots on each side. Mayer uses trichloroacetic acid to cauterise these areas, and states that in a large percentage of cases the relief is permanent. "When actual obstruction occurs, such as deflected septa, enchondroses or hypertrophied mucosa over the turbinals, surgical intervention adds to the certainty of permanent relief."

J. S. Fraser.

E.A.R.

Results of Auditory Re-education.—G. de Parrell. "Proceedings of the Parisian Society of Laryngology, Otology, and Rhinology," January 10, 1914.

For a year the author had the opportunity of examining and observing large numbers of drug subjects treated by the electrophonoid acoustic method. The following are some conclusions arrived at:

(1) The anacoustic method in the majority of cases gives results far superior to those obtained up to the present by the classical methods

The degree of improvement is very variable, and never reaches the *restitutio ad integrum*, save in some cases of juvenile sclerosis.

(2) Treatment of deafness by the anacoustic method is physiological in character, not anatomical, that is to say, that auditory re-education has no action on cases of deafness with atrophy of the labyrinth and auditory nerve, or consecutive to more or less complete destruction of the internal ear or auditory centres. It is absolutely contra-indicated in congenital deaf-mutism, in sudden deafness of syphilitic or meningeal origin, and in the greater number of cases of marked deafness resulting from infectious and toxæmic labyrinthitis (mumps, typhoid, and pneumococcal etc.).

(3) In a general way the improvement observed is in inverse ratio with the age of the patient and the chronicity of the lesion. In practice it is much better not to give a prognosis as to the degree of improvement, one would thus be open to disappointment, as it is impossible to gauge beforehand the reactionary power and excitability of the labyrinth. Nevertheless, when there is *paracusis willisii*, a commencing sclerous labyrinthitis, recent adhesive otitis or juvenile sclerosis, we may expect a good result.

(4) Deafness from chronic disease demands prolonged treatment, and results are only maintained by repeated acoustic exercises at regular intervals, and more or less frequently according to the degree of loss of hearing. The labyrinth, like every other organ, should be continually exercised in its function on pain of physiological deterioration. It is therefore advisable from time to time to resume the auditory exercises, just as one mobilizes a joint, the seat of ankylosis.

(5) Anacousis has a distinct influence on the auricular circulation, and consequently on the evolution of adhesive processes or suppurations of the middle ear. The mechanism of these vascular phenomena seems to be the following: Stimulation of vaso-motor nerves under the influence of sonorous vibrations, energetic vaso-dilation, increased blood-supply, and therefore copious flooding of the entire auricular region.

The clinical proof of the existence of these phenomena lies in the reawakening of the glands of the auditory tract (reappearance of cerumen), slight congestion of the manubrial plexus, and rapid cessation of otorrhœa (active congestion permitting diapedesis and consequently phagocytosis).

(6) Acoumetry with the watch or tuning-fork has only a very relative value in regard to auditory re-education. The loud voice, and especially the soft voice, alone enable us to make an exact estimate of the progress in hearing. Moreover, as Gradenigo (Turin) has recently stated, "examination with the voice is most in favour with aurists, and is most physiological." The acoumetric value of soft voice, maximum, is insisted upon, for as soon as one exceeds this maximum laryngeal vibrations appear, and it becomes the loud voice. There is therefore every reason to believe that in using this soft voice maximum in the successive tests to which one subjects the patient, one maintains the same degree of intensity, and averts the causes of errors which may happen with the whispered voice, the limits of which are relatively more elastic. However, no error on the part of the experimenter can explain the strides in hearing such as those observed in many re-educated deaf people, which extends, for example for the soft voice, from 4 to 5 cm. to 2 and 3 m., and for the loud voice from 50 cm. to 8 to 10 m. Moreover, the patients themselves, and their friends, thoroughly realise the progress made when

having been incapable of hearing for a number of years, they can after treatment hear a play, what is going on at a conference, a telephonic communication, and generally all that concerns them in ordinary life. It is, however, the greatest satisfaction to all of us engaged in combating so painful an infirmity as deafness, to see so many of those who have committed themselves to our care, restored to social life, recover their lost spirits, and express their gratitude in impassioned terms. This consoles us in the difficulties which we are continually meeting, and encourages us for the future.

M. Munch remarked that in a general way one year's experience for a new method was not a prolonged one. It is not sufficient to record satisfactory results at the end of treatment, especially when it concerns re-education of a function as delicate as audition; it is indispensable to keep patients under observation for a long time, so as to insure against error, *e. g.*, declaring as cured or even improved, patients who at the end of a certain period complain of a definite increase of their deafness. Lastly, even if in the future the apparatus championed by Parrel fulfils its promises, deaf subjects will not all resort to auditory re-education. Numerous lesions, such for example as adhesive otitis, will remain amenable to our usual methods, and will be still greatly improved by current forms of treatment, such as passage of bougies, æration of the tympanum, and massage.

H. Clayton Fox.

A Case of Vertigo Shown for Diagnosis.—H. Thursfield. "Proceedings of Royal Society of Medicine." Neurological Section. June, 1916, p. 83.

The case was that of a male, aged forty-nine. His symptoms were giddiness, persistent vomiting, and a tendency to fall backwards, which began five years previously, and had gradually increased in severity. He had no paralysis and no retinal lesion. The left ear was the seat of a labyrinthine deafness.

The labyrinth was completely removed. The patient made an uninterrupted recovery, and the vomiting was entirely relieved.

A left facial palsy followed, which still persists. The giddiness, though improved, is still present, and occasionally he suffers from vomiting. The tendency to fall backwards is also frequently marked. Though on the whole there is considerable improvement, it cannot be said that the operation has abolished his symptoms.

There is no further development which would point to intra-cranial disease.

Archer Ryland.

MISCELLANEOUS.

- (1) **Right Laryngo-hemiplegia following a Gôitre Operation.**—(2) **Right Adductor Paresis from Pressure of Enlarged Cervical Glands.**—L. G. Davidson. "The Medical Journal of Australia," June 3, 1916.

CASE 1.—A young woman operated on for exophthalmic gôitre in 1914 had immediate loss of voice following operation, and a violent laryngeal spasm was set up when she attempted to swallow fluids. Mirror examination showed complete right laryngo-hemiplegia. The voice was reduced to a whisper at first; afterwards it became husky, feeble, and

unmusical. After eighteen months the voice had greatly improved and the suffocative attacks had ceased. On phonation the sound cord completely closed the glottic chink. A compensatory action of the sound cord made up for the inaction of the paralysed one.

CASE 2.—Adult male. Nothing the matter with voice in ordinary conversation—when he has to shout his voice “breaks” or “cracks.” Both sides of the neck along the borders of the sterno mastoid muscles are occupied by a string of enlarged lymphatic glands, some of them as large as a hen’s egg. The cords adduct well on phonation, but on inspiration the right cord lags behind its fellow, and gets no further than the *l’adoveric* position. Several examinations may be necessary before one can determine an adductor paresis. An adductor paralysis may be present from the pressure of a *gôitre* without there being any loss of voice or laryngeal symptoms whatever. This being so, every case of *gôitre* should be examined laryngoscopically before and after operation. Cases of enlarged cervical glands also should be examined for adductor paralysis as a matter of routine.

A. J. Brady.

An Excessive Bleeder.—Hurd. “Laryngoscope,” December, 1915, p. 856

The patient was a male, aged twenty-seven. There was no family history of hæmophilia, but the patient had suffered from epistaxis since his fifth year. At the age of six tonsillotomy was performed, but there was no alarming hæmorrhage. At twelve years there was severe bleeding after the removal of teeth and intravenous saline infusion was necessary. Later the patient fell and injured his hip, and this resulted in a large hæmatoma from which 1 lb. of blood-clot was removed. Hurd saw the case on April 28, 1914, and found tonsillitis, deviation of the nasal septum with erosions. *The clotting time of the blood was then normal.* Submucous re-section was performed and the packing removed at the end of twenty-four hours without hæmorrhage. Eight days later the tonsils were removed by dissection and snare under ether anaesthesia. Four bleeding points were ligatured in each tonsil fossa. Some hours later the patient vomited blood and morphia was administered. The vomiting continued and the pulse became weak, so the “Murphy drip” was begun and pressure was applied with gauze sponges to both fossæ. As the vomiting continued, morphia was again given and normal horse-serum was injected. Next day the pulse could not be counted and the temperature rose to 103° F. Morphine was again given and also coagulose. May 1: No hæmorrhage. Coagulose again given. May 2: Recurrence of bleeding. Three Michel clips applied. For two days there was no hæmorrhage, but again on May 5 and 6 the trouble recurred, necessitating the insertion of more clips. The last of the clips was only removed one month later.

Hurd states that the case clearly showed that there is another condition that causes excessive bleeding than the demonstrable changes in the blood, which make up the picture of hæmophilia. The patient’s blood clotted promptly, not only in the capillary tube but also in his throat and after entering the stomach. Hurd thinks that there was some fault in the walls of the blood-vessel. The coagulose appeared to have no effect. Prof. Howell examined the patient’s blood on a subsequent occasion and thought it possible that the condition of the blood might vary from time to time. Howell found a low amount of prothrombin and a somewhat high amount of antithrombin in the plasma.

J. S. Fraser.