

NOSE.

Oppikofer, E. (Basle).—*On Calculus of the Antrum of Highmore.* "Arch. für Laryngol.," vol. xx, Part I.

Although concretions (rhinoliths) are found not very infrequently in the nasal cavities proper, their occurrence in the accessory cavities is exceedingly rare. The writer found record of only five cases, in each of which the maxillary antrum was affected. The first two cases are recorded in ancient medical works of the years 1686 and 1738 respectively. So similar, however, are the two accounts that they must be regarded as referring to one and the same case, the second being merely a copy from the first. The patient suffered for many years from a vesical calculus, for the removal of which he underwent an operation. Subsequently he was troubled by the gradual onset of great pain in his right upper jaw, which was followed by the appearance of an external swelling. This was incised and a hard irregular stone of the size of a pea (or a bean, as in the second account) was removed. The remaining three cases were described by Zuckerkandl, Harke, and Kahnity. In the first of these the stone was of the size of a hazel-nut and exactly corresponded in its structure with the ordinary rhinolith. The nasal wall of the antrum was bulged into the nose and the alveolar process was expanded. The case was observed only after death, and owing to advanced decomposition the condition of the mucosa was undeterminable. In Harke's case, also observed *post-mortem*, the stone was the size of a pea and the antrum was full of stinking pus. The case reported by Kahnity came under treatment for copious nasal hæmorrhage. The right antrum was found to contain offensive purulent masses and a chalk stone of the size of a hazel-nut, which had apparently eroded a branch of the internal maxillary artery.

The author relates a case observed by himself. The patient was a woman, aged sixty, who had suffered for twenty years with muco-purulent discharge from the right nasal cavity, which, as a rule moderate in amount, occasionally became profuse and fœtid, and was accompanied by pain in the right side of the face. Exploratory puncture was performed and the right antrum was found to contain a considerable amount of fœtid pus. Eventually the Caldwell-Luc operation was undertaken and on the floor of the cavity was found an irregularly round concretion, rather larger than a hazel-nut. In chemical composition this stone resembled a rhinolith. On section with a saw after embedding in celloidin no foreign body could be found in its anterior. Histological examination of pieces of the mucous membrane of the antrum showed extensive carcinomatous change. As this was still quite confined to the mucosa and the latter had fortunately been completely removed, no recurrence took place. In this case the shape of the upper jaw was unaltered, while in the case recorded in 1686 there was external swelling, and in the example observed by Zuckerkandl the alveolar process was expanded. The author thinks that the change of shape which occurred in these two cases may have been due to carcinoma; such expansion of the upper jaw would probably have eventually occurred in his own case had the disease not been cut short.

Thomas Guthrie.

Mader, L. (Munich).—*Experiences of Killian's Radical Operation for Chronic Empyema of the Frontal Sinus, and an Account of a New Method of treating Empyema of the Maxillary Antrum.* "Arch. für Laryngol.," vol. xx, Part I.

The author of this paper gives an account of the results he has obtained in fourteen cases of disease of the frontal sinus, in all of which

Killian's radical operation was performed at least six months before the time of writing.

Pain is in all cases either completely absent or greatly diminished; in no instance has it returned in its former severity. Pain seldom disappears immediately after the operation; it usually passes away gradually as healing proceeds.

Discharge in a few cases has ceased, but in most it still continues, though in much diminished quantity, and consisting mainly of mucus. The reason for this is that the preservation of the orbital bridge makes complete obliteration of the cavity impossible, and the whole of the space behind the bridge is not, as Killian had hoped it would be, filled up with scar tissue or orbital fat.

The *cosmetic result* is, in the great majority of the cases, excellent, but in a few with very high and deep cavities fairly pronounced depressions have resulted.

The *general health* has in all cases strikingly improved, and several patients have completely lost the mental depression from which they previously suffered. All cases, with a single exception, are now following their accustomed employment.

The author regards Killian's method as, on the whole, better than any other, and attributes the unfavourable results which some surgeons have obtained to incompleteness of operation. He lays especial stress on resection of the supra-orbital nerve and extensive removal of the ethmoid cells. He also removes carefully from the ethmoid region all shreds and tags of mucous membrane which might subsequently help to narrow the fronto-nasal passage. In most cases he considers drainage unnecessary, but in a few, in which the passage between the orbital bridge and the posterior wall of the sinus is narrow, he employs a glass tube which reaches from the orbital bridge to the anterior nasal opening.

A short description is added of the author's method of treating chronic empyema of the maxillary antrum. He believes strongly in local post-operative treatment under control of the eye through a large opening in the canine fossa, and has obtained good results by exposing the interior of the cavity to the action of light. More recently, however, he has employed the galvano-cautery, using special burners for the purpose, and thoroughly cauterising each of the walls of the cavity separately at intervals of three or four weeks. The resulting inflammatory reaction is never excessive, and pain is allayed by the application of ice. The method has hitherto been employed in seven cases, of which three are still under treatment and two are almost cured, the discharge being greatly diminished. The remaining two are now quite free from discharge, although they were cases of old standing which had been under treatment for long periods, and had never shown even a temporary cessation of the discharge.

Thomas Guthrie.

E.A.R.

Eagleton, W. P. (Newark, U. S. A.).—*The Value of v. Stein's Symptom in the Diagnosis of Labyrinthine Suppuration.* "Arch. of Otol.," vol. xxxvi, No. 3.

In 7 out of 17 consecutive cases of tympanic exenteration labyrinthine fistula was found. In two of these both the cochlea and semicircular canals were involved, in 5 the semicircular canals alone. From a methodical application of Stein's method in between two and three hundred persons the author was convinced of their great value in the diagnosis of labyrinthine suppuration.

Dundas Grant.