

tions. Malignant disease would have its own peculiar history. Syphilitic perichondritis of the septum has a bright red color, with soft touch, quite foreign to simple deviations.

Prognosis is generally favorable. Removal of the stenosis by surgical operation is usually followed by normal nasal breathing, relief of the catarrhal symptoms, and restoration of the natural voice. Of course subsequent treatment until complete healing is also required. Where asthma or hay fever is the result of deviation, the removal of the latter always favorably modifies the neurotic disease.

Treatment.—Happily the great majority of cases of deviation of the nasal septum do not call for treatment. Where the deformity is merely a flexion, whether unilateral or sigmoid, without producing sufficient stenosis to obstruct nasal breathing, surgical interference is not required. A large number of persons carry septal deformities from childhood to old age without ever becoming sensible of their presence, either from nasal stenosis or resultant catarrhal symptoms. Again, a large number of cases of spineæ occur which never produce sufficient respiratory or catarrhal difficulty to render their removal advisable. The essential feature which demands treatment is presence of stenosis, which, as a rule, is traumatic in its origin, and rarely comes into the hands of the specialist for treatment until long after the disorganization has become permanent and solidified.

If, immediately after injury, the surgeon in charge, instead of contenting himself with obtaining for the patient an æsthetically presentable nose, were also to apply a solution of cocaine to the fractured septum, and then press it into place by means of instruments always at his command—retaining it in situ by a tampon of antiseptic absorbent cotton or sponge tent—many of these deviations, with all their attendant evils, might be avoided. Three cases of this nature, which might have been prevented, were treated by me during the last few months. (1) A child of seven years. One nostril was completely occluded by a distorted fractured septum. The injury had been produced by a fall one year previously. The septal condition was not discovered by his physician until a few days prior to my first examination. (2) A gentleman, æt. 50 years, was kicked by a horse nearly a year

before, producing fracture of the septum, with great deformity. This was not noticed by the patient until the left ala commenced to flap on inspiration. (3) A young lady who had been thrown from a horse, injuring her nose, had, as a result, a large curved crest, which pressed for its whole length against the right inferior turbinated. The internal injury was not discovered until solidification had taken place. In each of these cases the deformity, to say the least, would have been very much less if the surgeon at the time of injury had followed some such plan as I have suggested.

I can but glance at the different methods of treatment in vogue since Quelmaz, a century ago, proposed daily digital pressure as a corrective.

Palliative treatment by sprays, washes, unguents, etc., has little temporary and no permanent effect; consequently, radical or surgical treatment of one kind or another is the usual practice when stenosis is sufficiently great to demand interference. Forty-five years ago Diefenback¹¹ advised that the projections should be sliced off with a knife. In 1847 Heylen¹² dissected back the mucous membrane, and cut off the protruding part with scissors. Chassignac¹³ in 1851 adopted a nicer surgical procedure. After dissecting back the mucous membrane, he made a number of incisions through the cartilage, and, pressing it back to its normal plane, held it there by tampons until it became solidified. Ingals¹⁴ improved upon this by excising a V-shaped piece of the deflected cartilage and afterwards applying sutures; while Seiler and Heyman removed the projecting portion with a carpenter's chisel. Of punches, those of Blandin and Roser were frequently used, until Steele,¹⁵ in 1879, introduced his stellate punch, which is now considered the best of this class of instruments. In 1875 Adams¹⁶ constructed a forceps for straightening the septum. Jurasz¹⁷ in 1882 improved upon this, and the combination, called the "Adams-Jurasz" is now used by a large number of rhinologists. After cocainization, the blades are introduced into each nostril separately, fastened together by a screw, and the pressure increased until the septum is

11. "Die Operative Chirurgie," Bd. 1, Leipzig, 1845.

12. "Annales de la Soc. de Méd. d'Anvers," Gaz. Med. 1847, p. 810.

13. "Gaz. des Hôpitaux," 1851, p. 420.

14. "Arch. of Laryngology," vol. 3, p. 297.

15. *St. Louis Courier of Medicine*, May, 1879.

16. *British Medical Journal*, Oct., 1875.

17. *Berlin Klinische Wochenschr.*, 1882, No. 4.