degree is it influenced by disorder of the portal circulation, and what is the importance as an etiological factor of sexual irritation, delayed menstruation, amenorrhæa, menorrhagia, and other uterine floodings? Is there any constancy or unity of bacterial association? Is it ever the direct sequence of an exanthem, or of insanitary surroundings? Further statistics and facts are also required on the peculiar physiognomy of the subjects of atrophic rhinitis. Is there always an upturned and abnormally patent nostril? Lastly, is it ever curable?

Answers to all these points and to many others in rhinal pathology are required before we can hope to have any uniformity of classification, and this circumstance is at once an excuse for the imperfections of the one I now offer tentatively for your criticism, as well as a justification for my proposing it at all as a subject for your deliberation.

A CASE OF FIBRO-MUCOUS POLYPUS OF THE NASO-PHARYNX.

By CHARLES WARDEN, M.D.,

Senior Surgeon, Birmingham Ear and Throat Hospital.

WILLIAM BURTON, about twelve, residing in Birmingham, of anæmic temperament and delicate constitution, came to me at the Birmingham Ear and Throat Hospital, about two years ago, suffering from mucous polypi in both nostrils, and a small growth lying at the back and immediately behind the uvula, hanging down from the roof of the soft palate, from its posterior and upper surface, which appeared of a much denser structure, tough, smooth, and of pyramidal shape. His mother informed me that his throat had been affected three years, following an attack of scarlet fever; after recovery from the fever, his mouth was superficially ulcerated; he talked thickly, complained of his throat, some dysphagia and was generally out of health; she took him to the Children's Hospital, and the doctor (a lady) told her that there was a growth in the throat, which was corroborated by others.

The mucous polypi were removed from the nostrils, and after a time I operated upon the fibrous growth by the electric-cautery, but the wire loop giving way, recourse was had to the curved blunt-pointed scissors, and there was very little hæmorrhage, the boy being convalescent in a few days, and no trace of the tumour could be seen. About a year ago, the mother perceived again the substance in the nostrils, and brought him to me. On examination I found mucous polypi in both nares, and a re-appearance of the fibrous growth behind the uvula in the post-nasal space; the fibroma increased in size, and after endeavouring to rid the nares of the mucous polypi from time to time, under the impression that the growths were not connected, but (at length) detecting a small mucous appendage growing from the apex of the fibrous cone, I came to the conclusion that the nasal polypi were united to the fibrous growth. The

fibrous tumour was shaped like a pyramid, with apex downwards, and was attached to the upper and posterior surface of the soft palate, being about the size of a walnut; he never had any defect in hearing or tinnitus, but vertigo at times; was of a very excitable and nervous temperament; breathing was difficult, but no dysphagia, and unable to breathe through the nostrils, especially the left, in which the largest polypi existed, neither was he able to blow air through them; snores in his sleep with open mouth and has headache.

The first operation was on November 5, 1887 (under chloroform, of course); the second was delayed on account of his bad and unsatisfactory state of health, which improved under tonic treatment with iron, etc., etc.

On July 6, 1888, I again operated with the electric-cautery; unfortunately the wire again gave way by the extreme temperature of the battery, and again I had to fall back upon the use of the scissors, the growth being pulled well forward by hawk-claw forceps, completely turning the soft palate inside out, as it were, the line of attachment being distinctly marked, and the growth easily separated and cut through with the scissors. There was very little hæmorrhage comparatively, considering the broad base by which it was united with the soft palate, and he recovered from the effects of the operation and chloroform with very little vomiting, and a very small quantity of blood being mixed with the vomit. The tumour, on examination, was of a dense fibrous texture, smooth, pyramidal, and attached by broad base, as seen in the specimen, the apex downwards, with a small mucous polypus on apex of the cone, and under the microscope showed characteristic structure of fibrous tissue, the small appendage being distinctly mucous.

Fibromata of the soft palate are usually small and pedunculated, according to some authorities, and they occur most frequently on the posterior surface of the palate, are slow in growth, and the true fibrous polypus usually arises from the base of the skull, according to Cohen.

Nélaton asserted that fibrous naso-pharyngeal polypi never originate from the cervical vertebræ, as they were supposed to do in many instances, but were from the periosteum, which covers the inferior surface of the occipital and body of sphenoid. As to the cause of fibromata, it is in obscurity, and seems to be difficult to form an opinion upon. Some authors state that they are rare. In my own practice I have seen several, and it appears more common among the French than in this country.

The pathology of these tumours has been well considered by Panas, who has shown that the mucous membrane round the posterior nares, and in the immediate neighbourhood of these orifices, presents a kind of transitional form between the mucous membrane of the nasal fossæ and the dense, closely-adherent, fibro-mucous lining of the pharyngeal vault. Growths in these situations are composed, to a great extent, of the structural elements of the tissues from which they originate, and whilst a polypus springing from the pituitary membrane may be expected to be of mucous texture, one from the under surface of the basilar process is likely to be fibrous, and a tumour taking origin from the membrane round the posterior nares, where the fibrous and mucous elements are mingled, will probably present a corresponding fibro-mucous structure.

282 The Journal of Laryngology and Rhinology.

In this instance, in which the tumour had branches (mucous) extending both into the pharynx and into the nasal fossæ, the pharyngeal part is fibrous, with a small mucous polyp on its apex—the nasal offshoots being mucous in character.

On July 9, 1888, came to hospital, and no trace either of fibrous tumour or mucous polypus, either in pharynx or nares, to be seen, being also quite well in himself, very cheerful and happy.

July 26, 1888.—This patient came again to the hospital to-day, and I regret to have to report that another growth had made its appearance, vascular and suspicious in its nature, on the left side of posterior nasal space, and also more nasal polypi in left nostril. These I removed at once, but I fear the other growth is of a more serious character. The boy looks very anæmic, dusky in countenance, and presents the aspect of malignant disease. I have, therefore, decided to send him into the country for a month before performing any further operation upon him.

Although this may be another form of fibroma, or fibro-mucous polypus, I have grave suspicions that it may turn out a true sarcoma.

1889.—On his return to me after being a month in the country, I found him in a much better condition, although the growth had considerably increased in size. I again operated, and brought away this large mass of fibrous tissue, with some mucous polypi attached, and extending from it into and along the course of the left nostril. This seemed to thoroughly and completely bring away the entire growths, and since then he has had no return of it whatever, and I trust it is perfectly eradicated. I have carefully kept him under observation up to the present time, having seen him during the last month, and am pleased to be able to state that there is now not the slightest vestige to be seen.

ON THE USE OF THE DENTAL DRILL IN THE TREATMENT OF DEVIATIONS AND SPURS OF THE NASAL SEPTUM.

By ADOLF BRONNER, M.D., Surgeon to the Bradford Eye and Ear Hospital.

ON examining the interior of the nares by anterior and posterior rhinoscopy, we are struck by the large number of cases in which the septum narium is bent or thickened. Morell Mackenzie examined 2152 skulls, and found that in 1657 cases, or 77 per cent., there was a more or less unsymmetrical position of the septum. Zuckerkandl says that, out of 370 skulls, the septum was symmetrical in 123 cases and unsymmetrical in 140, and that it was irregularly thickened in 107 cases. He found that the septum was always symmetrical in the skulls of children under seven years of age. Loewenberg¹ found that the septum was perfectly straight in about 14 per cent. of the cases he had examined.

 $^{^1}$ '' Anatomische Untersuchungen über die Verbiegung der Nasen-scheidewand '' : '' Zeitschrift für Ohrenheilkunde,'' 13, p. 1.