ANTERIOR RHINITIS SICCA: ITS ORIGIN AND CURE.

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Anterior rhinitis sicca is well known clinically to all rhinologists and to general practitioners in the habit of using the nasal speculum, though perhaps, not so generally known under the title just read. It occurs so often that one may find it easily in more than 50 per cent of noses examined in a routine way. In many cases it is so mild in extent and in its effects as to produce practically no discomfort; at other times, so severe as to cause annoying crusting, soreness, nasal obstruction, even alarming nasal hemorrhage. On the basis of this condition frequently arise septal perforation and the so-called "bleeding polyp," source of many cases of nasal hemorrhage.

Parker and Pegler⁴ throw an interesting light on the close causal relationship of anterior rhinitis and bleeding polyp, in their contribution of two cases of bleeding polyp in which anterior rhinitis sicca preceded tumor formation. Koerner⁵ described a case in which perforation followed rhinitis sicca, Sasadatelew⁶, a perforation occurring in front of a bleeding polyp.

Emil Glas¹ concluded from the study of ten cases of septal polyp that the polyps arise as the result of an inflammatory reaction which, while causing atrophy of the glandular elements of the mucosa, produces a richly vascular connective tissue, which, if the vascularity were greatly developed, might be termed an angioma. He concluded, also, that with more advanced atrophy of the mucosa, perforation of the septum was apt to occur. Schiffers², as early as 1894, advanced the view that the perforating septual ulcer is the result of thrombosis of the nutrient vessels.

Muller⁷, Trautmann⁸, and Nakamura described septal polyps from a microscopic standpoint. Of five cases reported by these men, three were highly vascular fibromata, and two, granulation tissue.

McKenzie³, found giant cells at the edges of some perforations. As there is no suggestion in his report that the cases were either syphilitic or tuberculous, it may be that these were foreign body giant cells.

Clinically, on examination, one finds a greater or less amount of crusted secretion on the anterior inferior portion of the septum,

just within the vestibule. If the crusting be absent in whole or in part over the affected area, an excoriation of the mucosa, evidence of recent nosebleed (little areas of hemorrhagic extravasation), more or less scarring of the mucosa, perhaps small areas with actual loss of epithelial covering with granulations growing up from the denuded areas may be perceived. At times the mucosa may present the appearance of a healed scar, showing none of its normal pinkish red color, or that extreme result of atrophy of the mucosa and cartilage, a septal perforation.

Above, are a few notes describing the appearance, microscopic and gross, of anterior rhinitis sicca and the allied conditions, bleeding septal polyp and septal perforation. The purpose of this paper is to present my view of the fundamental cause of these lesions, which I believe to be a mechanical one.

Several years ago, I was struck with the great frequency with which patients complained of a crusting on the septum, just within the nose, very variable in degree, and with the fact that nose bleed cases where the bleeding occurred from this area, (the common site of spontaneous nasal hemorrhage), almost without exception, suffered from this crust formation, although it might be in very slight degree. In noting this crusted or excoriated area in hundreds of cases, it finally dawned upon me that there is always to be found back of such an area a septal prominence, a spur or a deflection of the septum. This spur acts as a barrier to the usual action of the air current in removing secretion. In the passage of the secretion through the nose, a certain amount of it is deposited upon the mucosal surface just in front of this septal prominence and sheltered from further expulsive air currents, dries in this position. Repeated deposits in the same way form a crust. After the accumulation has assumed a sufficient size to attract the attention of the owner, he is apt to dislodge it with the finger tip. Such forcible removal naturally injures or tears the mucous membrane slightly and if frequently repeated, will lead to a definite anterior rhinitis sicca. It is easily seen how readily bleeding can arise from an area of mucosa inflamed or ulcerated from the frequent trauma of removing very tenacious crusts by means of the finger nail—the usual method. Also, how readily the congested vessels of such an area are ruptured by a violent blowing of the nose, scratching with the finger tip or the sharp edge of a passing crust.

If one accept the mechanical theory for the origin of anterior rhinitis sicca and its allied conditions, namely, the presence of a

septal spur or prominence, removal of the deformity at once suggests itself as the logical first step in therapy. With the source of repeated irritation removed, more rapid healing of the lesion would naturally follow.

With a view to testing this theory, I have operated on six patients with entirely confirmatory results. To anyone wishing to convince himself of the value of operation in curing this often very troublesome condition, by doing the operation himself, I would say that to get a good result, the septal wall should be made as straight and flat as possible. To this end, one must avoid any fold of mucosa such as is apt to occur where the mucous membrane is redundant, having previously covered the septal spur or prominence. In such a case naturally the submucous removal of the deformity must be supplemented by removal of the excess amount of mucosa.

Operation in this condition may also be done where there is recurrent nasal hemorrhage arising from this septal area in order here as well to obviate the fundamental cause.

While only a small number of the patients having this condition require operation, I hope the operative treatment suggested in this paper will be found useful by other workers in this field.

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