A NEW METHOD FOR THE RELIEF OF NASAL STENOSIS.

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The relief of stenosis of the inferior meatus has been accomplished in various ways, which have not all proved satisfactory. Chemical caustics, submucous injections and the galvano-cautery destroy much of the mucous membrane, as does also excision with snare, scissors, etc.

Operations on the bone have been objectionable for the same reason, and the scar resulting from excision, cautery or caustic, is a constant source of annoyance to many patients.

There are many patients whose meati are narrowed, from early childhood, as the result of post nasal stenosis in whom neither the bone nor overlying membrane is hypertrophied; others with comparatively healthy membranes, but the turbinate bone hooks over and its edge is prolonged toward the floor of the nose; still others with deviations or spurs of the septum who, after correction of these conditions, complain of insufficient air space, and, lastly, many cases of moderate hypertrophy to which the following operation is applicable:

The nose is first cocainized well and a hollow trephine, driven at a high rate of speed, is caused to puncture the mucous membrane at the anterior end of the inferior turbinate bone. It is then pressed backward, parallel to the septum, with its surface just hidden under the mucous membrane, cutting a core from the turbinate bone, on its convex surface, from front to back; the drill at no time emerging from its submucous position. If the groove thus formed in the bone is not wide enough, after freeing the trephine from the bone which usually comes away in its interior, another core may be taken below or above the first, and in this manner enough bone removed to give free passage through the nose when the mucous membrane is pushed into the bottom of the groove. The nostril is then packed with gauze in narrow strips for a few hours, making sure that it pushes the membrane to the bottom of the

groove. The operation being practically submucous, the hemorrhage is trifling and does not recur on removal of the packing, which I usually leave in place six to twelve hours. The following cases will serve to illustrate its application:

CASE I.—Mr. E., had deviation of the septum into the left nostril from a fracture in boyhood. This was corrected by crushing the septum crowding over and retaining in position until union occurred, resulting in a straight septum. The left inferior meatus, from disuse, had failed to develop to a normal size, and the patient complained of not getting sufficient air through it, although much better than before the septum operation. A groove was taken from the convex surface of the turbinate bone by submucous trephining, and in a week the membrane covering was firmly adherent to the bottom of the groove where it has since remained, with complete relief of the stenosis and a sound membrane which performs its function normally.

CASE II.—Bertch, B., 7 years of age, a hay fever sufferer, a victim of adenoids and enlarged tonsils. Removal of these benefitted him, but the meati did not develop sufficiently. The inferior turbinate bones of both sides were hooked, and the overlying membrane when in its best state, with no swelling or hypertrophy, was almost in contact with the septum. The most common changes of temperature caused pressure and occlusion, and frequent attacks of asthma. The inferior edge of the turbinate bone and a groove on its convexity were removed by submucous trephining, and on account of the dread of operation and delicacy of the patient, this was performed under general anesthesia. Healing was prompt and uneventful, and the asthmatic attacks and hay fever were relieved.

CASE III.—Mary E., a neurotic subject, who had nasal stenosis from hypertrophy of the membrane overlying the turbinates and resulting tinnitus aurium with impairment of the hearing. This was a case in which excision or cautery of the hypertrophied tissue would be indicated, but trephining was done instead. Healing as usual was prompt, and resulted in complete relief of the stenosis and slight improvement of the tinnitus, with marked gain in hearing power.

These are only sample cases, but illustrate the types before enumerated and show the benefits to be derived which are, first, preservation of a normal or intact mucous surface upon which crusts do not form; second, absence of sepsis, which is liable to follow the larger and slow healing wound of the snare or cautery; third, prompt healing without nasal discharge; fourth, applicability to a class of cases, in which treatment of the membranes would not serve to reduce the stenosis, while the nose is left physiologically active; lastly, permanence. All of the above cases and many others, are from six months to three years old, and in none has the slightest return of stenosis occurred.