SPASMODIC NASAL STENOSIS, WITH SPECIAL REFERENCE TO A NEW NASAL TUBE.

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The active man in the practice of medicine is sooner or later confronted with cases of a chronic character, which no manner of medication seems to control in any great degree, and yet one is reluctant to acknowledge symptomatic therapeutics unsatisfactory.

The special student of rhinology is convinced at an early period in his studies that we have here frequently located a pathological state which, without doubt, affects the whole body. To illustrate the point, I will mention the case of a man, *æt.* 25 years, who for about two months suffered from diarrhœa and palpitation of the heart, alternately, and over which apparent intelligent medication seemed to have control only in a minor degree. During the end of the second and beginning of the third month the following symptoms were superadded in rapid succession, *viz.*: Cough, dyspnea, hemoptysis, loss of appetite, loss of sleep and asthenia. It is not often that I have seen so many symptoms due to one cause as in this case, as all of the above mentioned symptoms were present in a severe degree at the same time during part of the third month. Examination of the nasal passages in this case disclosed an osseous tumor, whose origin was the side of the nasal chamber, causing pressure upon the septum, probably in the course of the naso-palative nerve. The daily application of strong carbolic acid, limited to the apex of the tumor, relieved *all* of the symptoms within two weeks and brought about, without further medication, a renewal of strength and vigor.

It is not my object to call attention to tumors, but to a condition not infrequently met with in adults—*i. e.*, so-called nasal stenosis. The causes of stenosis may be divided into four groups: 1, deviated cartilaginous septum; 2, spasm; 3, growth, and 4, deviated osseous septum. It is the second class, stenosis caused by spasm, to which I wish to call attention. There are no pathognomonic symptoms. Chronic affections of the stomach and disease of the heart, besides other reflex symptoms are, in the patient's estimation, of more importance than a more or less obstructed breathing upon one side. These symptoms when found should call our attention to the nasal passages.

It is hardly possible that an examiner would mistake deflection of the septum or growths for a stenosis due to a spasm. The stenosis is generally unilateral. Upon raising the alæ with a speculum or thumb we find, on inspection, nearly on a level with the front of the maxillary bone, a slit-like opening—the osteum narium internus anterior is conspicuously discernable in this affection—this slit-like opening admits of the passage of a nasal dilator on its introduction to the post-nasal space; however, after the removal of the dilator the passage quickly resumes its former appearance. By decided spraying for a few days, oil of vaseline being the best medicament, including the use of the dilator, we finally succeed in inspecting the passage. The opening is much smaller, tubular in character, and

FIGURE 1. NASAL TUBE.

FIGURE 2. NASAL TUBE IN POSITION.

EXPLANATION TO FIG. 1.

1. Foramen anterior.	2. Foramen posterior.
3. Superior or part facing the nasal roof.	4. Inferior or part facing the nasal floor and upon which the nasal tube rests.
5. Septal or greater wing, a part contiguous to the cartilaginous septum.	6. External or lesser wing.
7. The annulus is placed at the inferior, near the posterior angle.	

has not the configuration of the normal passage, and the turbinated bones are nowhere visible on anterior inspection.

The prognosis is based altogether upon the character of the chronic inflammation and amount of hyperplasia, from which latter the spasmodic stenosis results. Not only, when not correctly interpreted, may the inflammation prove a fruitful source for a long invalidism, but also, when uncared for, there may be engendered a condition which frequently is the direct cause of many of the reflex troubles found in this class of patients. I believe that many of these reflex

troubles are extremely dangerous to life and think that many sudden deaths should properly be credited to this trouble.

The treatment of the chronically inflamed membrane is that which is generally in use by all specialists, so that the management of the stenosis need only be referred to. For this I use a gold nasal tube which I have found very satisfactory and which gives great comfort to the wearer in this class of cases.

After the dilators have been used to such an extent that the tube can be introduced, we then have, in addition to the action of the tube as a dilator, a tube for breathing. The tube is easily introduced and removed by the aid of the ordinary splinter forceps, and at times by the finger alone. Should, at any time, the tube meet with obstruction on introduction this can readily be overcome by the ordinary dilator, with or without the oil spray. The tube, when in place (see Figure 2), is not discernible from the exterior and is not easily displaced by blowing the nose or hawking.

The nasal tubes are made for the right and left side and in four sizes, viz.: temporary, permanent, large and extra large. The temporary, or smaller, one is very convenient for a few months' use, although it occasionally becomes clogged with secretion, in which case it is easily removed and cleaned. After a variable time the next larger, or permanent, one may be substituted. This size does not require the attention that the temporary one does. It is advisable to wear this second size until the existing hyperæmia has subsided. After the removal of the permanent size, any relapse, from whatever cause, should be met by a reintroduction of the tube.

It should be borne in mind that to derive the maximum amount of benefit the tube should be made to fit the nose and not the nose the tube. There will, at times, be cases wherein, at the superior posterior angle, the lumen of the tube will be found too great; this, when present, will cause more or less irritation to the eye or that side.

To overcome this defect, bring the sides of the tube together for about the distance of two or three lines, just sufficient to overcome all unequal pressure. In case the septal wing causes pressure upon the septum this may be overcome by curving inwards, towards the lumen of the tube, a small part of the antero-inferior angle.

The tube was made for me by Mr. Frank Rehbaum, 40 Clybourn avenue, Chicago.

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