

the throat is also affected, the tone becomes somewhat muffled. The eyes may become red and watery from pressure upon the nasal duct; hearing may be compromised by occlusion of the Eustachian tubes; the sense of smell may be suspended or destroyed; and the face, from the continued breathing through the open mouth, loses its natural expression. I might add that periodical frontal headaches are often complained of.

The nasal discharges are usually largely augmented as well as changed in character. Thick viscid mucous gathers in the tortuous nasal cavities, and owing to the occlusion is very difficult to be got rid of. The whole of the glands, in connection with the inflamed tissue, pour out an abnormal amount of secretion of a mucous or muco-purulent character. This accumulates in the sinuosities of the turbinated bones, forming fetid masses or scabs, and rendering the breath offensive, the drainage backwards often extending the catarrhal disease both to the pharynx and larynx.

On examination of the parts anteriorly, the mucous membrane will usually present a somewhat reddened appearance. The lower turbinated bone, covered to a more or less extent with mucoid discharge, will project towards and sometimes impinge upon the septum; while the surfaces of both may be somewhat irregular. On pressing the parts with a probe, the swelling becomes indented, and but sluggishly resumes its wonted contour. The lower turbinate as a rule hangs downwards as well as toward the septum; while the middle one when hypertrophied, projects in a rounded manner directly inwards. Hypertrophy of the upper turbinated does not usually occur; when it does, the enlargement is limited.

A thorough posterior examination is attended with much more difficulty than an anterior one. Still by the use of the rhinoscope, the posterior ends of the upper and middle turbinates, and the upper part of the lower one, can in many cases be seen, as well as the greater part of the septum. When hypertrophy exists, the membrane will be found of a grayish color, and projecting into or filling entirely the posterior channel. This may be confined to the lower turbinate or may involve the middle one also—the septum frequently taking part in the abnormal thickening.

Some authorities divide posterior hypertrophies into two divisions, white and purple; the former

being harder and more frequent than the latter. The chief difference between them consists of the soft venous character of the purple variety.

*Diagnosis.*—The anterior diseases which might be mistaken for hypertrophic rhinitis, are acute rhinitis and simple chronic rhinitis. The former of these two is diagnosed by its recent origin, smoothness of surface, greater sensitiveness, higher color, and quicker resilience on pressure. The latter, by the general evenness of the inflammatory action, there being an absence of the irregularities of hypertrophy. There is also less tendency to stenosis; and at the same time, a quicker response to ordinary local treatment.

Posterior hypertrophic rhinitis might sometimes be confounded with posterior nasal polypi, on account of similarity in color. The polypi, however, are softer to the touch, more movable, and exhibit a brighter and smoother surface.

*Prognosis.*—Rhinal hypertrophy rarely if ever assumes a dangerous form *per se*. In some cases it progresses to complete occlusion, remaining in this condition indefinitely, or until past middle life, when it gradually recedes, leaving the parts almost in a normal condition again. In the majority of instances, however, if not relieved by surgical treatment, it will, after lasting for years, pass on into atrophic rhinitis, with all its distressing and in many instances, loathsome results. The sense of smell may be completely lost, taste materially affected, and hearing in a great measure destroyed.

*Treatment.*—If hypertrophic rhinitis came under observation during the early stages of its development, local medical treatment would in many cases effect a cure. Unfortunately, however, the hypertrophy is usually far advanced when the patient presents himself for treatment. It is when partial or complete stenosis so interferes with the natural respiratory effort, and with the normal voidance of the mucoid discharges, as to make life miserable and the breath offensive, that the patient usually seeks for relief. In these cases operative interference becomes necessary, to produce anything like a good result.

In the early stages, mild alkaline sprays or douches are very effectual in cleansing the rhinal cavities, being applied both anteriorly and posteriorly as required. While fine sprays may be used cold, douches and washes with the posterior syringe