

especially when turned toward the left side, and the lower the head the sooner and more certain was the recurrence of the paroxysm. I examined the lungs, but could find nothing commensurate with the symptoms so graphically described. A few mucous rales were all that the stethoscope revealed.

I examined the larynx and trachea, even the bifurcation, with negative results. But the rhinoscope revealed a nasopharyngeal catarrh, with large hypertrophy of the inferior turbinated bones, the mucous membrane covering being hyperæmic; the hypertrophy was equal on both sides, but the septum being deflected a little to the left, rendered the corresponding nasal chambers almost impervious to air.

I touched the posterior part of the inferior turbinated bone on one side with bent probe, and by aid of the rhinoscope, when he at once had an attack of mixed coughing and sneezing. I thereupon gained his consent to remove the hypertrophied structures, which I did at that sitting with the snare.

Two weeks subsequently he reported himself better. I examined and found some hypertrophic mucous membrane, which I destroyed with glacial acetic acid. He has not been troubled with his irritating cough since.

I might add to the list of such cases, for they have not been uncommon during the past two years and a half since my attention has been more particularly directed to this subject, but will feel better pleased to shorten my own remarks, and allow others who may have similar experience to add to the number (in the discussion of which it is the object of this paper to evoke).

In looking for a physiological explanation of these facts, may we not find the chain of events something as follows:

The sensitive fibres of the terminal branches of the trigeminus nerve which supplies the part, are reflected along the motor fibres of the superior laryngeal nerve, exciting in the larynx the act of coughing, by causing contraction of the cricothyroid muscle. This muscular spasm is purely a functional derangement. But if this be prolonged, we find trophic changes going on in the part through reflected vaso dilator impressions which result in marked

tissue changes, congestion with abnormal secretion.

Quitting the arena of physiology, we may gather up our scattered threads into a concluding practical suggestion: it occurs as a corollary to the subject of *nose cough*. If a mere mechanical irritation of the middle, or especially of the inferior turbinated bone, or a hyperæmic or hypertrophic condition of those parts will induce a spasmodic cough, it would seem probable that in a child, by predisposition or heredity, catarrhal, the inhalation of air colder than usual, especially of a damp cold air, would be accompanied by turgescence, and finally hyperæmia of the erectile tissue, which occupies this particular part of the nose, and thus induce "spasmodic croup," for as what causes a severe chill in an adult induces often a convulsion in a child, so the cause of reflex spasmodic cough in an adult may induce spasmodic croup in the child.

I look to this area as the cause of many cases of constantly recurring spasmodic croup, which are generally said to be due to a "predisposition."

The measures that relieve those attacks, namely, emetics, hot fomentations around the neck, and hot pediluvia and warm inhalations are exactly the measures that relieve the hyperæmia of the nasal erectile tissue. They afford temporary relief, but the cure of the "predisposition" consists in the removal of all hypertrophied and diseased conditions of the nasal mucous membrane.

The practical conclusion from the above is:

1. That in all cases of asthma, spasmodic cough and spasmodic croup of doubtful origin, the nasal chambers should be carefully examined, and any diseased condition corrected.
2. That nasal polypi and hypertrophy of the turbinated corpora cavernosa when obstructing the lumen of the nares, should always be removed.

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MORPHINE IN THE VOMITING OF PREGNANCY. —Dr. W. C. Roberts, of Albany, Wisconsin, writes that in three cases of obstinate vomiting of pregnancy he successfully used muriate of morphine per rectum in half grain doses. Dr. Roberts asks for the experience of others with morphine given in this way.—*N. Y. Record*.