

speaking, but sub-acute exacerbations of the chronic disorders, symptoms produced by contact between the hard and soft tissues; "anterior hypertrophies," that is, over distended venous sinuses, caused by paralysis of the fine adjustment of the nervous mechanism or vaso-motor paralysis. An extra stimulant or irritant has brought the anterior swelling against the septum, and a cold in the head, or symptoms which come under that nature, are the result. Now, as to this matter of hypersecretion, which has been perhaps the most annoying of all the symptoms common to nasal disease, the symptom which brings the patient to the physician, and which the physician tries in vain to check by astringents, it is quite possible, as has been suggested by a number of writers, that in many instances there is no hypersecretion present, or that there is perhaps the normal amount of mucous present. How do we reconcile apparent hypersecretion with a diminished nasal flow? By remembering that with partially occluded nostrils in front, the current of air is too feeble to carry along the mucus and distribute it over the general surface? It remains where it first comes to the surface, or is carried to the posterior nares, the watery portions disappear by evaporation, the remaining inspissated portions are gotten rid of by hawking and nose-blowing. We are unconscious of normal bland nasal secretion, but are made unpleasantly aware of this altered mucus. Another explanation which is not very old, and which may account for this apparent hypersecretion, is that the lymphatic tissues within the nostrils, and especially the group of lymph follicles at the vault of the pharynx, known as the third tonsil or Luschka's tonsil, becomes disorganized by the long-continued passive congestion incident to nasal obstruction; and these lymphatic glands do not re-absorb the nasal secretions, when it has reached the post-nasal pharynx. This conjecture is based on the known physiological functions of the intestinal lymphatic absorbents. It is possible to believe, therefore, that as in the case of hypertrophy of chronic hypertrophy catarrh, the apparent hypersecretion is not altogether, or in most part, one of the phenomena of a chronic catarrhal process of mucous membrane, but a normal secretion retained in the post-nasal cavities because of the closure to the air current in front. These are pathological data which have strong clinical significance, and they indicate one, and only

one, line of treatment. Enlargements of the turbinated structures at the posterior ends of the bones, or posterior hypertrophy are also mainly due to anterior nasal obstruction. These soft swellings behind are secondary to the ones in front and are dependent upon them. Remove the anterior ones and admit atmospheric pressure, and the posterior ones will immediately diminish in size, and will usually disappear altogether.

Two or three short sentences to sum up what we have tried to say in regard to the pathology of nasal disease. 1. The turbinated enlargements, the most common lesion of hypertrophic catarrh, are made up not of connective tissue infiltration, as we should expect if they were the result of long-continued catarrhal inflammation, but they are the "erectile tissue" of Bigelow, the turbinated corpora cavernosa which have become permanently dilated, and their contractile powers gone. Our physiological function has become pathological. 2. In addition to the irritations from without, we have constantly irritating factors in deviations of the septum and in cartilaginous and bony excrescences upon the septum when they come in contact with the soft parts, as they do at an early stage of the disease. 3. Anterior closure of the nostrils from these sources means mechanical swelling all the way along the nasal channels, which disappear when the obstruction in front is removed. 4. It is quite possible that the apparent hypersecretion of a so-called catarrhal process is not real, but an accumulated normal secretion.

Now, as to treatment, I repeat the first section of this paper, "The successful treatment of nasal disease is to-day essentially surgical." The indications for treatment are exceedingly simple, although there may be some choice as to the measures to be adopted. 1. Nasal obstructions must always be removed. 2. Contact between the soft tissues and the septum must always be prevented.

In dealing with soft swelling I agree with Dr. Harrison Albs, of Philadelphia, when he says that the galvano-cautery is the best surgical instrument we have in the treatment of nasal disease. There is but one agent that comes in competition with it, and that is chromic acid. As to the respective merits of these two agents. It is a little difficult to gauge the amount of destruction and