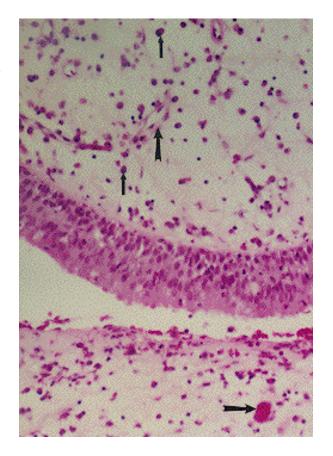
Nasal (Inflammatory) Polyps

Pale grey to pink, soft shiny masses, usually bilateral and multiple, nasal polyps arise more from the paranasal sinuses than from nasal mucosa. Allergy and infection are the chief causes. The choanal polyp is attached within the maxillary sinus and often completely occludes one side of the posterior nose.

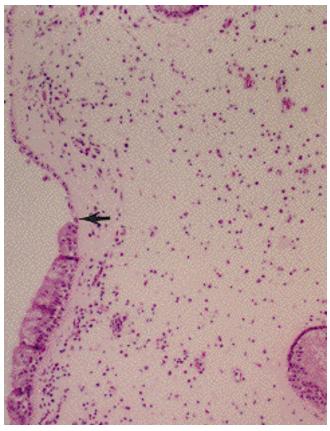
Microscopically, the epithelial lining of a nasal polyp is of the respiratory type unless metaplasia has occurred changing the epithelium to a squamous type. Allergic polyps are associated with large numbers of eosinophils whereas polyps which are the result of infection contain more plasma cells, lymphocytes and neutrophils. The basement membrane is thickened, sometimes greatly, especially in the case of allergic polyps.

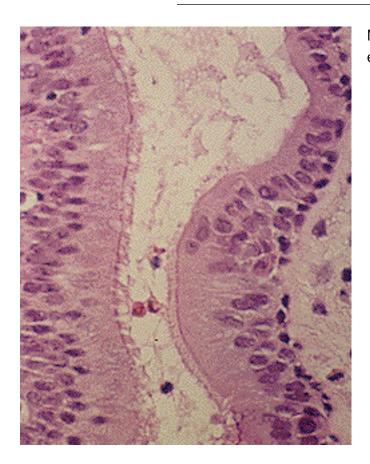
The stroma varies greatly from polyp to polyp. Usually it is edematous with an admixture of acute and chronic inflammatory cells and a few fibroblasts and small vessels. Sometimes, however, the stroma appears much more substantial with more of a granulation tissue appearance. Choanal polyps are apt to have more of a fibrous stroma than allergic polyps, which are edematous and contain eosinophils. There are mucus glands and mucus cysts in many polyps. Vascularity is variable and blood vessels often contain smooth muscle.

Nasal polyps, inflammatory ("allergic") with plasma cells, (small arrows), lymphocytes and eosinophils. The stroma is loose and edematous. Pseudostratified columnar epithelium covers the surface of one polyp but is missing from the second polyp. Larger arrows point to blood vessels, smaller arrows to plasma cells.

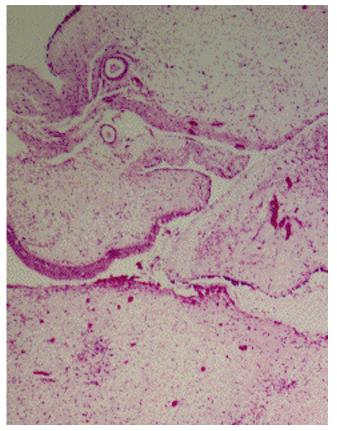


Nasal polyp, inflammatory; note change in epithelium (arrow) from a pseudostratified type with goblet cells to a simpler type. Mucus glands are present deep in the polyp.



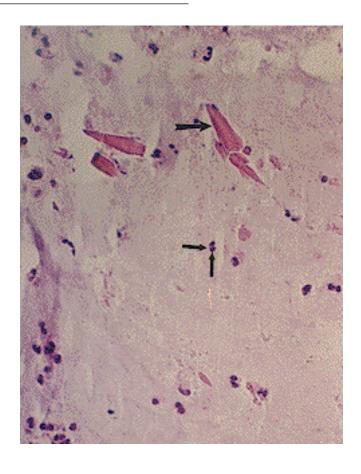


Nasal polyp with large duct, having ciliated columnar epithelium.



Nasal polyp, antral-choanal type, with multiple fingers. The stalk or pedicle was attached to the mucosa of the maxillary sinus. This tissue is loose and edematous while other choanal polyps are more dense.

Nasal polyp showing Charcot-Leyden crystals (single arrow) and eosinophils (double arrows) from which the crystals are derived. These crystals are also found in secretions from the lungs of asthmatics.



CLINICAL ASPECTS

Treatment of nasal polyposis by medical means is used initially since polyps which are the result of infection may readily disappear when the underlying sinal infection is cleared. In other cases, where polyps are essentially allergic in origin, management of the patient's allergy may correct the condition.

Surgical removal, however, is required in many cases and this may vary from simple extraction of polyps as an office procedure to extensive intranasal and sinal surgery. Even though previously removed polyps have been submitted to the pathologist for examination, polyps should continue to be examined after each removal since sinonasal polyps ("inverting papilloma") or frank malignancy may eventually appear.