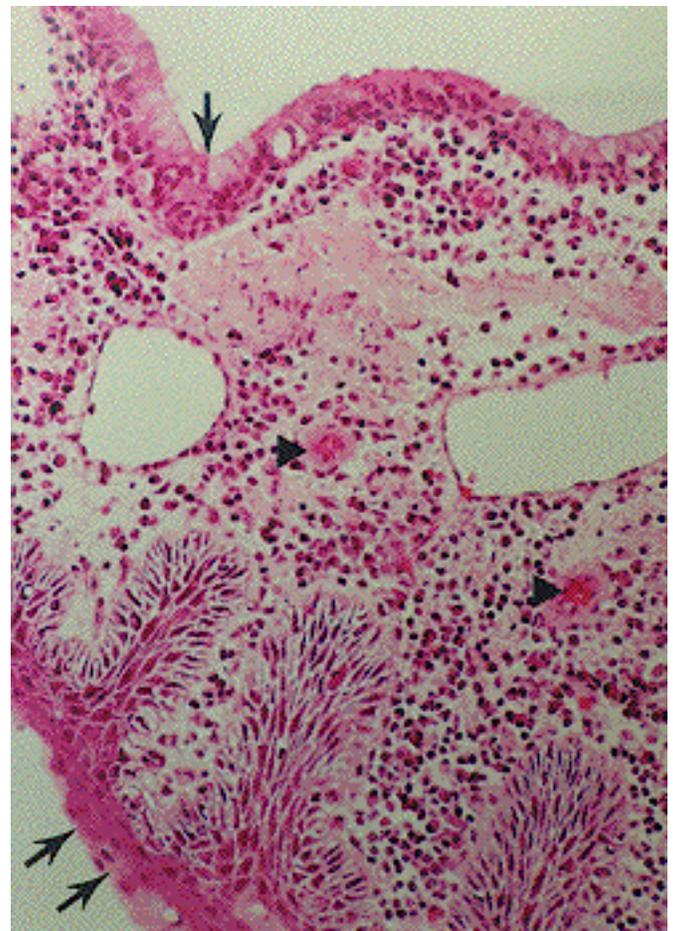


## AURAL POLYP

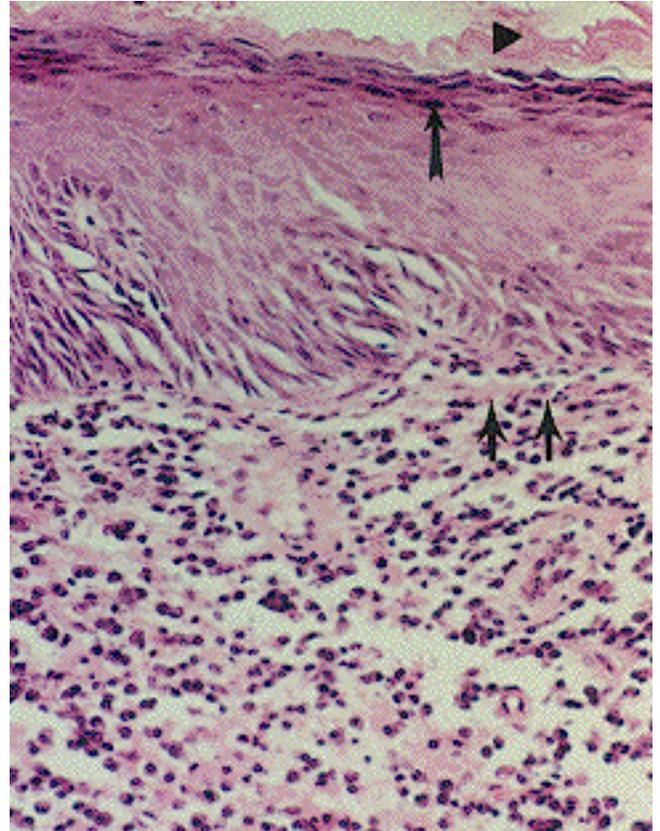
Aural polyps are the result of chronic inflammation of the middle ear or mastoid. As seen clinically, polyps represent granulation tissue or edematous mucosa arising from the mucous membrane of the middle ear protruding through a perforation in the tympanic membrane (also see Clinical Aspects). Granulation tissue polyps in the forming stage are soft, red, and bleed readily when touched. Later, polyps become more fibrous and the surface may be covered with metaplastic squamous epithelium so that they no longer are bright red but dull pink. Purulent otorrhea is invariably present.

Microscopically, polyps show a chronic inflammatory reaction with many small blood vessels and histiocytes and some show fibrous tissue and cholesterol crystals. The surface of the polyp may be ulcerated or there may be pseudostratified columnar or cuboidal epithelium or squamous epithelium due to metaplasia in polyps of long duration. Polyps are commonly associated with cholesteatoma.

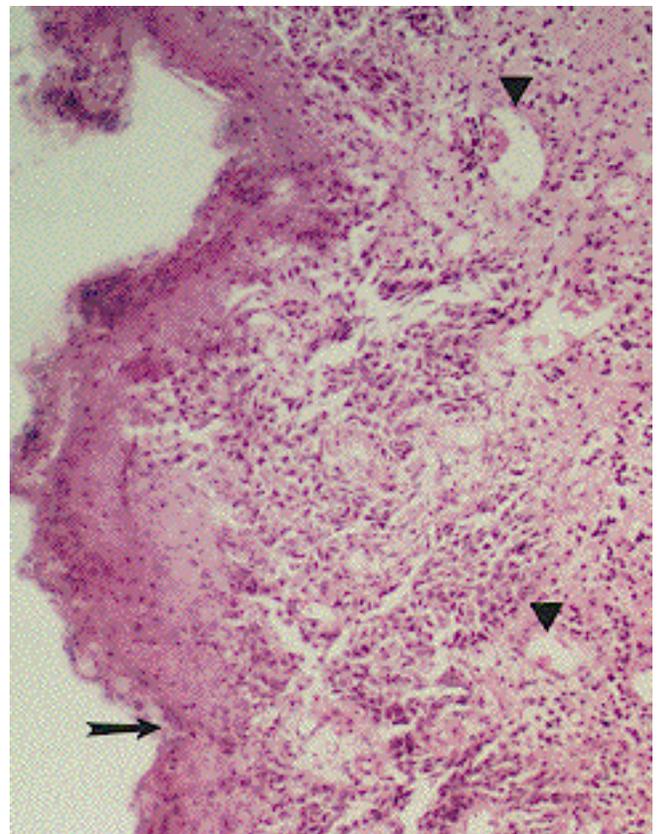
Aural polyp from the middle ear composed of granulation tissue showing a mucous membrane side with low columnar cells (single arrow) and a squamous side (double arrows) facing outward (metaplasia). The large spaces with endothelial lining are blood vessels. There are also several budding capillaries (triangles) and many chronic inflammatory cells. When the polyp was removed and the ear treated with antibiotic drops, the inflammation subsided. In other cases, however, particularly if cholesteatoma were present, more radical surgical treatment may have been necessary.

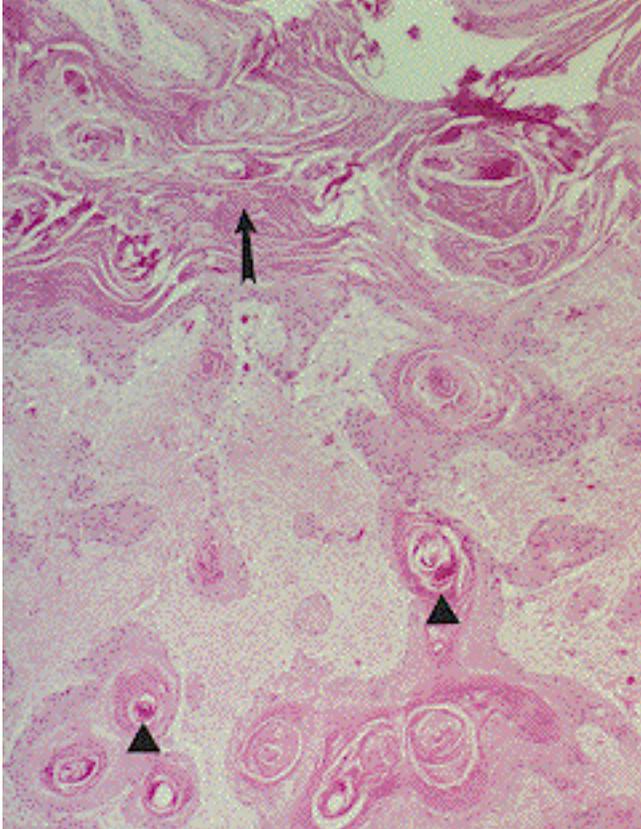


Aural polyp showing thick layer of well developed squamous epithelium with a granular cell layer (single arrow) and keratin desquamation (triangle). This epithelium rests on chronic granulation tissue (double arrows). This section through a large aural polyp with squamous epithelium might be considered cholesteatoma matrix overlying granulation tissue.



Aural polyp arising from the ear canal in patient with an intact tympanic membrane. Squamous epithelium (arrow) covers granulation tissue in this part of the polyp. The remainder of the surface was ulcerated. Here the polyp was the result of trauma to the epithelium of the ear canal. Triangles indicate blood vessels amidst fibrocytes and chronic inflammatory cells.





Squamous cell carcinoma of ear canal that mimicked an inflammatory aural polyp was treated as such for months before a biopsy was made. Unfortunately, this diagnostic error is not unusual. Heavy keratinization is seen on the surface (arrow) and there are keratin pearls (triangles) in the center of the deeper nests of invasive carcinoma.

### **CLINICAL ASPECTS:**

In addition to polyps of middle ear origin, there are polyps that arise from the skin of the ear canal, especially the bony section of the canal. They are red and covered with pus and are the result of trauma and superimposed infection. It may be difficult to distinguish between polyps arising from the middle ear and those arising from the external ear since either may fill the meatus and obscure the exact site of origin. Treatment is by removal of the polyp, or as much of it as it is safely possible to remove, and then treatment with antibiotics. In the case of middle ear polyps in which there is mastoid disease, especially cholesteatom, mastoidectomy may be needed.