

Cystic chondromalacia of the ear

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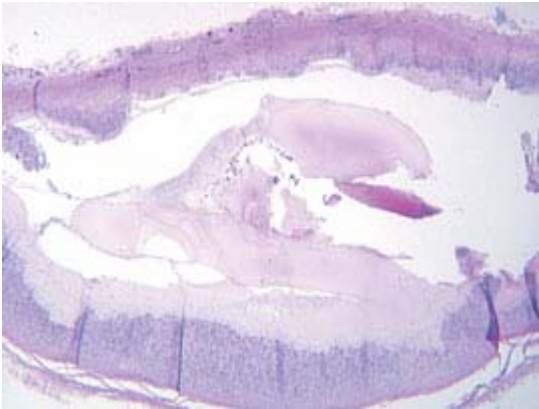


Figure 1. Low-power magnification shows the expansion and dilation of the auricular cartilage by the cystic cavity, which is not lined with epithelium. Focal debris and granulation tissue can be seen in the center.

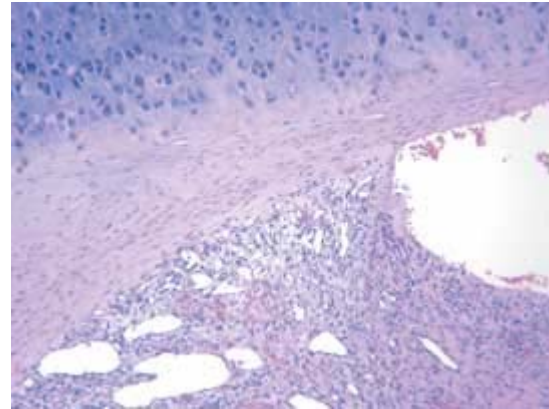


Figure 2. Normal basophilic (blue) cartilage can be seen in the top of the field. Fibrosis (pink, spindle-shaped cells) separates the cartilage from the granulation tissue in the center of the cartilage. The granulation tissue is made up of dilated vessels (spaces), which occasionally contain erythrocytes, histiocytes, and inflammatory cells.

Idiopathic cystic chondromalacia (endochondral pseudocyst of the auricle) is a benign cystic degenerative lesion of the auricular cartilage. The lesion appears as a painless unilateral swelling along the upper half of the ear, usually in the area of the scaphoid or triangular fossae adjacent to the helix. The disorder affects young and middle-aged men more often than it does women. Trauma is an associated, although not proven, etiologic factor.

Macroscopically, the lesion appears as a well-defined cystic cavity in the auricular cartilage, which is often filled with clear to yellow fluid ("olive oil") that can be expressed (figure 1). Microscopically, the skin surface is intact. The lesion is defined by an empty, irregularly shaped cavity or cleft, most often in the central area of the cartilage. Because the space is not lined with epithelium, it is considered to be a pseudocyst. Granulation tissue (a rich vascular proliferation with erythrocytes, histiocytes, and mixed inflammatory cells) is present in most lesions, usually at the edge of the cleft (figure 2). The make-up of the remaining cartilage is unremarkable.

The clinical and histologic differential diagnosis includes relapsing polychondritis and chondrodermatitis nodularis chronica helicis (Winkler's disease). Relapsing polychondritis is a rare, systemic, autoimmune disorder that results in a progressive degeneration of cartilage caused by autoantibodies to type II cartilage. Cartilage in multiple sites throughout the body can be affected.

Histologically, there is a loss of cartilage basophilia, cartilage necrosis, and mixed inflammation that extends from the perichondrium and permeates toward the middle, without cyst formation. Chondrodermatitis nodularis chronica helicis results in a painful, raised nodule on the superior

helix in addition to central skin ulceration. Histologically, there is ulceration, hyperkeratosis, granulation tissue, and inflammation down to, but not including, the cartilage.

Excision or curettage is usually the treatment of choice. Anterolateral wall excision produces a better cosmetic result than does full-thickness excision.

Suggested reading

Heffner DK, Hyams VJ. Cystic chondromalacia (endochondral pseudocyst) of the auricle. *Arch Pathol Lab Med* 1986; 110: 740-3.
Mills SE, Gaffey MJ, Frierson HF. *Atlas of Tumor Pathology: Tumors of the Upper Aerodigestive Tract and Ear*. Fascicle 26, 3rd Series. Washington, D.C.: Armed Forces Institute of Pathology, 2000: 398-400.