CERUMINOMA
(CERUMINAL GLAND ADENOMA)

Cerumen glands are located in the outer or cartilaginous portion of the external auditory canal and are modified apocrine glands. These modified sweat glands are similar to the apocrine sweat glands of the axilla. Large glands, coiled and tubular, they open directly onto the skin surface or join sebaceous glands and open onto hair follicles. They are limited to the outer portion of the external auditory meatus and produce cerumen.

Apocrine glands represent scent glands in contrast to eccrine glands (sweat glands) which primarily serve in the regulation of heat. It has been noticed that, during secretion, part of the cell of an apocrine gland seems to be pinched off and released into the lumen and this has been referred to as “decapitation secretion.” Apo means “off” and thus the name apocrine, since cytoplasm of the secretory cell was pinched off. The inner layer of cells, those that are called snouts, project into the lumen and it is these parts that become “decapitated.”

A typical ceruminoma (benign adenoma) is small, usually a few mm. to 2-3 cm. in diameter, epithelial covered, and produces little in the way of symptoms except blockage of the ear canal.

Histologically, adenomatous cerumen glands, located in the dermis, resemble normal cerumen glands. There are two layers of cells, the inner layer being cuboidal or low columnar with apical snouts, and the outer layer spindle shaped. Yellowish pigment found in the inner cells represents cerumen. In addition to glandular formations, there may be papillary, solid, or cystic areas.
Ceruminoma, ear canal. Numerous well-differentiated glands and tubules with a two layered appearance that closely resembles normal cerumen glands. Inner layer shows tall cells with apocrine features, outer layer is basaloid.

Ceruminoma. Yellow pigment (arrow) represents cerumen.
Ceruminoma, two cell layer arrangement with tall inner cells (single arrow) and spindled outer cells (double arrows). Inner cells show apical snouts (triangle).

Cerumen glands in patient with chronic external otitis-fibrosis (triangle) and periductal chronic inflammatory reaction (arrow).
CLINICAL ASPECTS:

Excision of the adenoma should provide complete cure. Other tumors growing in this area are ceruminal adenocarcinoma, squamous carcinoma, and adenoid cystic carcinoma. Small epithelial cysts and fibromas also are seen.