EPIDERMOID **C**YST

Epidermoid cysts, usually l-4 cm. in diameter, are ordinarily subcutaneous although occasionally epidermal, and are seen chiefly in the skin about the head and neck and also on the backs of older persons. Rather uncommonly, an epidermal inclusion cyst may develop in the mouth. The content of the cyst is cheesy.

Epidermoid cysts (as well as pilar cysts) develop from hair follicles so that the term sebaceous cyst is inaccurate.

Microscopically, there is a wall of epidermis complete with a granular layer (lacking in the pilar cyst). Large cysts may have only two or three layers of markedly flattened cells in their walls. The entire cyst wall and its contents look just like cholesteatoma, shown for comparison in the upper right photo.

Sometimes the cyst wall ruptures and keratin spills out into the adjacent tissue or is imbedded in the cyst wall where the body recognizes it as a foreign substance and produces giant cells as part of a granulomatous inflammatory reaction.

Pilar Cyst (Trichilemmal Cyst)

Clinically, pilar (hair) cysts look like epidermoid cysts but they are less common and usually confined to the scalp. Formerly, the pilar cyst was referred to as a sebaceous cyst or wen, but because the cyst appears to be derived from the hair follicle the name trichilemmal or pilar is now preferred.

Microscopically, the pilar cyst contains homogenous keratinous material enclosed in a layer of pale cells that become swollen toward the cystic cavity. A granular layer is missing that is present in an epidermoid cyst and in the latter the cystic contents appear laminated rather than densely compacted as in the pilar cyst.

DERMOID CYST

These subcutaneous cysts are usually present at birth. They eventually enlarge and come to measure from l to several cm. There is a thick liquid in the cyst. Microscopically, epidermis with adnexae such as hair follicles and sebaceous glands are found that distinguish the dermoid from the epidermoid cyst. Some report the dermoid cyst as a benign cystic teratoma.

NASOLABIAL CYST

The nasolabial cyst, a rare developmental abnormality, causes a swelling under the upper lip at the base of the nose lateral to the midline. They may be bilateral. After years, pressure may produce bony erosion visible on a radiograph.

Microscopically, there is a pseudostratified, columnar epithelium sometimes with cilia or goblet cells.

VALLECULAR CYST

The mucous membrane of the hypopharynx contains submucosal mucous and serous glands which commonly become obstructed and produce small cysts between the base of the tongue and the epiglottis (vallecula). Rarely vallecular cysts become large enough to displace the epiglottis downward toward the larynx with hoarseness, shortness of breath, or dysphagia.

MUCUS RETENTION CYST (SALIVARY DUCT TYPE)

This is a true cyst since, unlike the mucocele and ranula ("mucus escape reaction cysts") of the oral mucosa, it is lined by epithelium. These cysts may occur in a major salivary gland or more commonly at the site of minor salivary glands such as the lip or floor of the mouth. Some cases are apparently without connection to salivary ducts while others represent cystic swelling due to ductal obstruction.

RANULA

Ranula means "little frog." The name likens the thin, tense, bluish cyst in the floor of the mouth to the belly of a frog. The ranula is not a true cyst but a mucocele or "mucus escape reaction" and stands in contrast to the mucus retention cyst (salivary duct cyst) which has an epithelial lining. The ranula or mucocele shows a granulation tissue response surrounding an area of mucus collection. Usually the mucus extravasates from the sublingual salivary gland but it may also come from the submandibular duct or minor salivary glands. "Plunging" ranula refers to a large swelling in the upper neck caused by a mucus collection so large that it splits through the myohyoid musculature.

Cystic Chondromalacia

This is a cystic lesion appearing on the anterior face of the auricle, measuring from 1 to 5 cm. in diameter and seen chiefly in men. The cyst contains clear fluid.

Microscopically, the lesion is seen to be a pseudocyst inasmuch as there is no epithelial lining with only fibrous tissue or granulation-like tissue being present in the cyst wall.

The cause is not known. Treatment is by excision. Branchial cysts and thyroglossal cysts are presented separately.



Epidermoid cyst, shows a thin layer of epithelium (single arrow) with a prominent keratinized layer (double arrows) and then laminated keratin squames filling a cystic space. Granular cell layer not prominent in this example. Cholesteatome cyst. Compare with epidermoid cyst, upper left. The two are almost identical. Here the "matrix" (double arrows) of the cholesteatome rest on granulation tissue (single arrow).



Pilar cyst. Note swollen epithelial cells (single arrow) toward cystic cavity, absence of intercellular bridges and any granular layer and the dense, compacted keratin (triangle). Peripheral cells in the cyst wall are said to be "palisaded" (double arrows). Compare with epidermoid cyst, noting especially the looser laminated appearance of the contents of the epidermoid cyst.





Dermoid cyst, skin of neck. This figure shows mature sebaceous glands (arrow) in a cyst wall lined by squamous epithelium. Here a sebaceous gland appears to be opening directly onto the epithelium rather than into a hair follicle as is seen in normal skin.

Nasolabial cyst. Goblet cells and a pseudostratified epithelium (small arrows) with chronic inflammation (large arrow) in wall of cyst. 30 year old woman with bilateral cysts that swelled the face externally and the vestibule of the nose internally. Vallecular cyst, lined by thick squamous epithelium (arrow) and filled with keratinous debris but without the associated submucosal lymphoid tissue seen in a branchial cyst. This cyst looks like an epidermoid cyst. Other cysts in the vallecula will contain only serous fluid.

Mucus retention cyst, lip. The epithelial lining (arrow) is shown.





Mucus retention cyst, lip. Higher power photo of cyst. Ciliated columnar epithelium resting on fibrous tissue.

Ranula. The wall of the mucocele (arrow) has no epithelial lining and is composed of fibrous granulation tissue.

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Cystic chondromalacia, auricle. The arrow indicates cartilage showing central cystic degeneration.

