

TONSIL

The palatine tonsil is a mass of pharyngeal lymphoid tissue with an external lining of stratified squamous mucosa, lying between the arches of the palatoglossal and palatopharyngeal muscles and just superficial to the superior constrictor muscle. Reaching down into the depth of the tonsil are crypts lined by squamous epithelium containing debris composed of desquamated epithelium, bacteria (especially actinomyces), and fungal organisms. The lymphoid tissue surrounding the crypts has nodules, often with germinal centers. Deep in the crypts the epithelial layer becomes blurred since the lymphocytes of the tonsil invade it. A capsule covers the parts of the tonsil not exposed to the surface and connective tissue septa extend into the tonsil from the capsule. It is between the capsule and the underlying muscular tissue that a peritonsillar abscess forms.

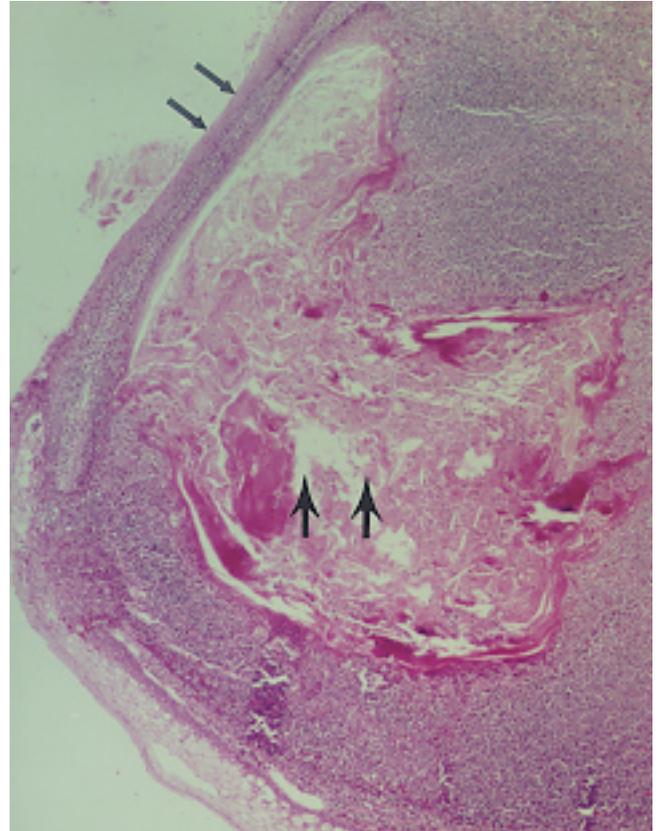
Islands of metaplastic cartilage and bone may be found within or adjacent to the tonsillar tissue, and irregular nests of squamous epithelium separate from the surface lining, are not unusual.

The pharyngeal tonsil or adenoid is an accumulation of lymphoid tissue on the superior wall of the nasopharynx, prominent in childhood and atrophic or gone in adulthood. Pseudostratified columnar epithelium lines the surface of the adenoid and metaplasia not uncommonly changes the lining to squamous epithelium. The epithelium blends in with the underlying tissue. Ciliated respiratory epithelium lines the nasopharynx near the posterior choanae of the nose and both squamous and respiratory epithelium line the remainder of the nasopharynx.

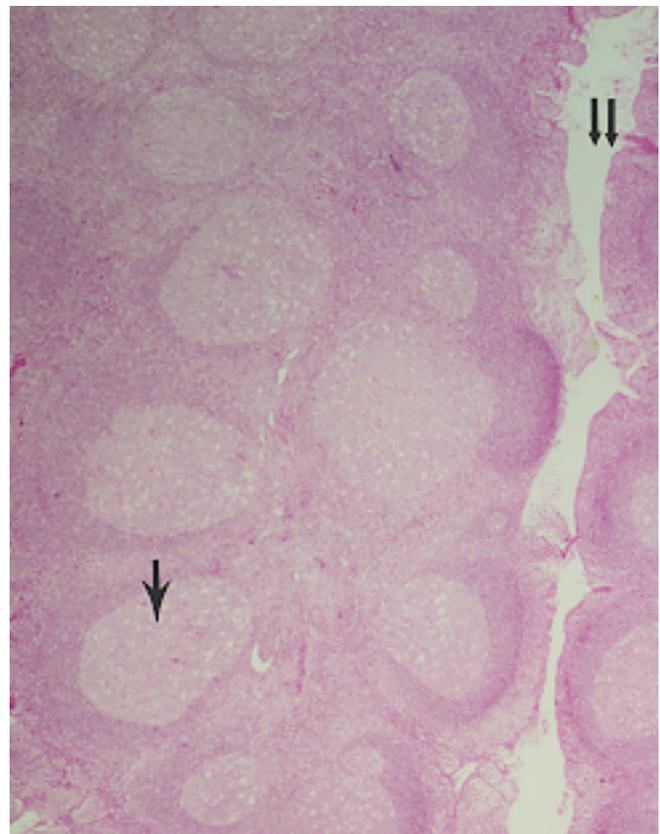
Lingual tonsil is found at the base of the tongue. Its epithelium is squamous and the underlying lymphoid tissue contains typical lymphoid follicles divided in the middle by a major groove. The lingual tonsil is often absent in adult life.

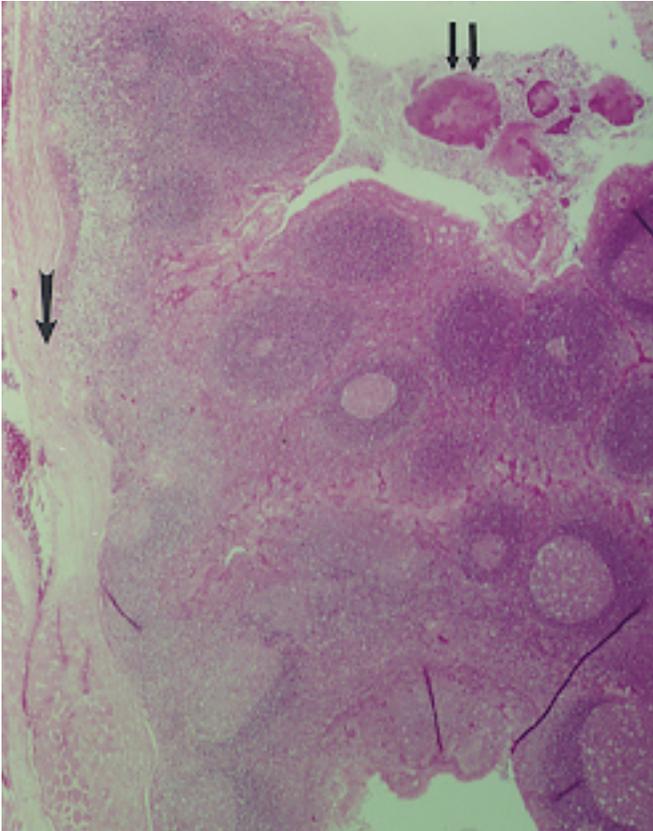
NOTE: None of the photos shown here represent entirely normal tonsils.

Palatine tonsil, keratinous cyst (large arrows). These cysts appear grossly as wheat grain or larger sized plugs of debris seen on the tonsillar surface of patients with particularly deep tonsillar crypts, and they extrude regularly. Note squamous epithelium (small arrows) on surface of tonsil and in crypt.

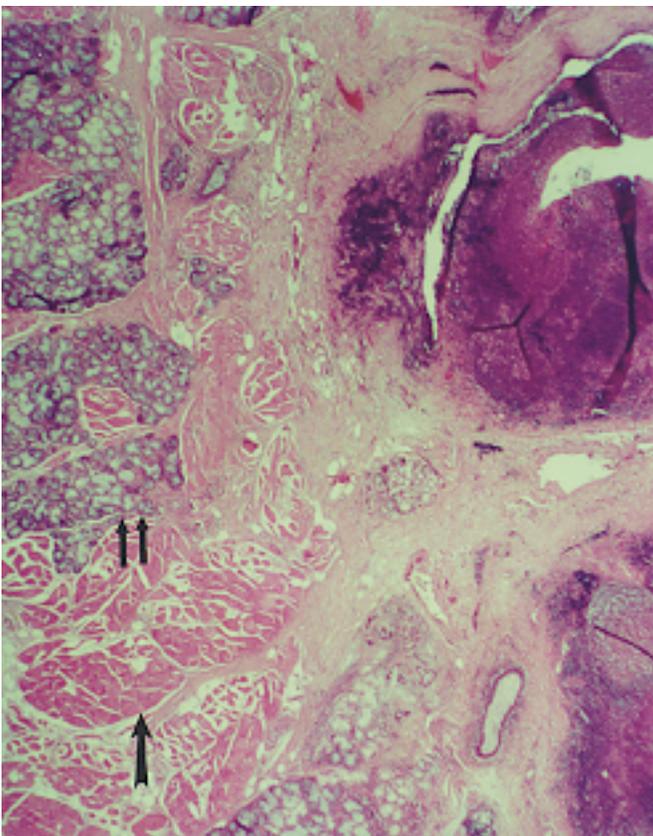


Palatine tonsil, follicular hyperplasia. A crypt (double arrows) with squamous lining runs into the depth of the tonsillar tissue. Lymphoid follicles (single arrow) with germinal centers are unusually numerous.



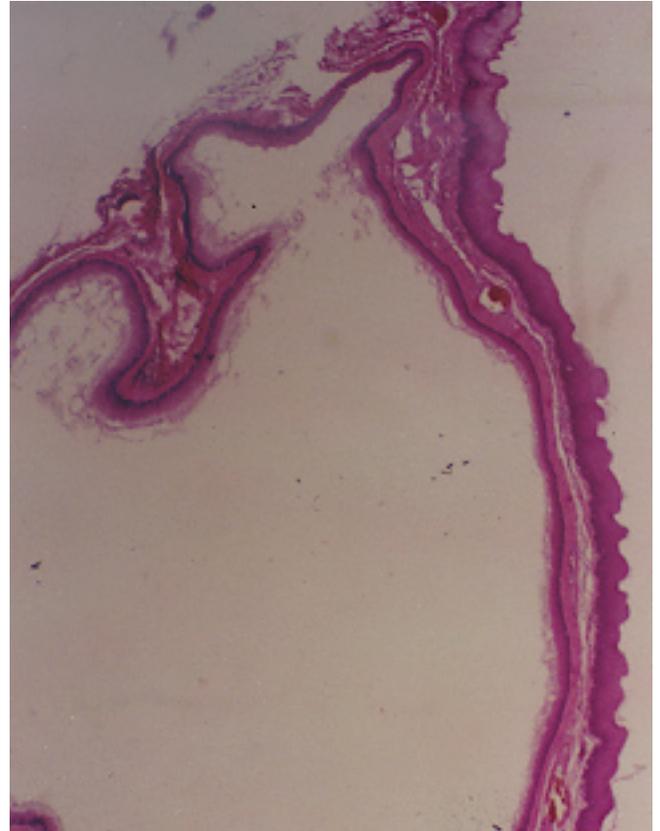


Palatine tonsil, bacterial clumps (actinomyces) in a crypt (double arrows). The tonsil shows follicular hyperplasia. The tonsillar capsule (large arrow) is well demonstrated. It is deep to this capsule that peritonsillar abscess (“quinsy”) forms.



Lingual tonsil. The base of the lingual tonsil is not well demarcated as is the case with the palatine tonsil. Tongue muscle (large arrow) and mucus glands (double arrows) are shown in this specimen from lingual tonsillectomy.

Tonsil, epidermal inclusion cyst. These cysts are common in the palatine tonsil where they appear as small, tense yellowish masses just under the mucosa. This is a true cyst with squamous lining. Usually no treatment is required.



CLINICAL ASPECTS

The adenoid derives its name from the time when lymph nodes were called lymph glands and lymphoid tissue was thought to be “gland”-like. The adenoid eventually becomes atrophic and may be entirely absent in adult life. If it is excessively large in the adult one must consider the possibility of an immunosuppressive disease such as AIDS.

Peritonsillar abscess, generally adequately treated by incision and drainage and antibiotics, may cause a fatality if neglected. The abscess can dissect inferiorly to the pyriform recess and then break into the airway, or laterally into the parapharyngeal space where it can cause carotid rupture, or extend along the carotid sheath inferiorly to the mediastinum, or superiorly to the skull base.

Lingual tonsillectomy, seldom required, is not a difficult procedure in spite of there being no easy plane of dissection such as there is in the case of the palatine tonsil.

In addition to infections of the various elements of pharyngeal lymphoid tissue (Waldeyer’s ring), neoplastic disease is not uncommon, especially squamous cell carcinoma and lymphoma.