

## Oral Histopathology

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### Series 13 (8 cases)

Case	Features
Cavernous hemangioma	<ul style="list-style-type: none"><li>Enlarged/dilated endothelial-lined channels located beneath the epidermis (this is skin; characteristic of 'basket-weave' keratin is the clue)</li></ul>
Mild to moderate epithelial dysplasia, with candida	<ul style="list-style-type: none"><li>Mild (lower third) epithelial disarray; high magnification highlights this, as well as mitotic figures in the basal layer</li><li>High magnification shows the thin purple-staining rod-like <i>Candida</i> hyphae oriented perpendicularly in the surface keratin layer (some round spores are also noted)</li></ul>
Squamous cell carcinoma	<ul style="list-style-type: none"><li>Well-differentiated, keratinizing, consisting of keratin pearls, marked epithelial cell and nuclear pleomorphism, individual cell keratinization and invasion into the connective tissue</li></ul>
Odontogenic keratocyst	<ul style="list-style-type: none"><li>Basal palisading, 5-8 cell layers, parakeratin, daughter cysts</li><li>Inflammation has caused focal loss of the distinct features (this is common in inflamed OKCs, as well as previous biopsy or marsupialization)</li></ul>
Canalicular adenoma	<ul style="list-style-type: none"><li>Benign salivary gland tumor, common in the upper lip</li><li>Cells have a 'basaloid' (blue or basophilic) appearance and align into strands or canals/canalculi which anastomose</li><li>There is a slate blue background but this is largely basement membrane type material and not myxoid background seen in mixed tumors</li></ul>
Benign mixed tumor (pleomorphic adenoma)	<ul style="list-style-type: none"><li>Circumscribed but not encapsulated, upper lip</li><li>Consists of predominantly epithelioid and plasmacytoid myoepithelial cells (most evident at highest magnification), a hyalinized (non-cellular pink) stroma, formation of cartilage (most evident at the higher magnifications), some cystic areas some of which are lined by squamous to columnar epithelium and other areas incorporating adipose (fat) and some areas showing squamous, keratinizing and calcifying characteristics</li><li>The presence of hair follicles (high magnification, near the blue inked margin) suggests that this tumor is derived from the skin, rather than oral (labial) mucosa; the term <i>chondroid syringoma</i> may be seen and is synonymous with <i>mixed tumor of skin</i></li></ul>
Polymorphous low grade adenocarcinoma (PLGA)	<ul style="list-style-type: none"><li>Some similarities to mixed tumor (slate blue stroma, streaming cells which bear resemblance to both mixed tumor and canalicular adenoma)</li><li>Other areas show streaming of individual cells, a separate tumor focus near the black inked margin (second image, upper left) and infiltration of two small nerve fibers (fifth image, near inked margin)</li><li>Linear streaming, perineural invasion and slate-blue stroma are all common characteristics in PLGA</li><li>This case did not demonstrate surface epithelium; it is recommended to sample/include epithelium; PLGA often abuts the surface while mixed tumor does not and this may aid in distinguishing the two diagnoses</li></ul>
Mucoepidermoid carcinoma	<ul style="list-style-type: none"><li>Cystic and solid areas containing mucus cells, intracystic mucus, intermediate cells, and squamous/epidermoid cells</li></ul>