

## Oral Histopathology

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### Series 31 (15 cases)

Case	Features
Fibroma, keloid-like	<ul style="list-style-type: none"> <li>Unremarkable squamous epithelium with underlying densely fibrous connective tissue, some areas are very acellular (keloids appear in this manner)</li> <li>Distinguishing <i>keloid</i> from <i>scar</i> and from <i>fibroma</i> may sometimes be challenging (and perhaps academic)</li> </ul>
Ameloblastoma	<ul style="list-style-type: none"> <li>This is 'classic' <i>plexiform</i> ameloblastoma with anastomosing cords of ameloblastoma with cells exhibiting peripheral palisading, reverse polarity of nuclei and formation of stellate reticulum</li> </ul>
Ameloblastoma	<ul style="list-style-type: none"> <li>This ameloblastoma has features of both cystic and solid architecture (management should be ruled by the solid component)</li> </ul>
Odontogenic keratocyst	<ul style="list-style-type: none"> <li>Basal palisading, 4-8 layers of cells, parakeratin in the cyst lining</li> </ul>
Orthokeratinizing odontogenic cyst	<ul style="list-style-type: none"> <li>Basal palisading is not evident, and marked orthokeratin production from a prominent granular layer is notable</li> </ul>
Lateral periodontal cyst	<ul style="list-style-type: none"> <li>This cyst, from the lateral aspect of a mandibular incisor/canine, appears to have a multilocular appearance and the term <i>botryoid odontogenic cyst</i> may be applied (these variants may appear as a multilocular radiolucency and have a higher recurrence rate if not completely excised)</li> <li>The histologic features are characteristic: a simple to squamous cyst lining with focal thickening and 'swirling' of epithelial cells</li> </ul>
Foliate papilla with taste buds	<ul style="list-style-type: none"> <li>Hyperplastic or inflamed foliate papillae, particularly those that appear red or hemorrhagic, may be biopsied based on location and concern for carcinoma</li> <li>The histology shows a nodule covered in stratified squamous epithelium (which shows taste pores at high power), and an underlying more brightly-staining neural plexus (it resembles neurofibroma to some degree) which is the nerve plexus that communicates the chemical taste from the taste buds to nerve fibers that connect to the central nervous system; this is referred in some literature as the <i>subgemmal neurogenous plaque</i></li> <li>A lymphoid aggregate is noted (this is part of Waldeyer's ring) as are some minor salivary glands</li> </ul>
Lymphoepithelial cyst	<ul style="list-style-type: none"> <li>Another common finding in the foliate papillae (and other areas of Waldeyer's ring including the lingual and palatine tonsils and adenoids), the oropharynx and nasopharynx, and floor of mouth (in the area of Level I lymph nodes) is the <i>lymphoepithelial cyst</i> which may bear similarity to foliate papilla (but is usually more of a clear to white/yellow nodule or cyst)</li> <li>The histology is that of a cyst lined by squamous epithelium and surrounded by lymphoid aggregates which may form follicles</li> </ul>
Mucoepidermoid carcinoma	<ul style="list-style-type: none"> <li>From the palate, this tumor is more 'epidermoid' and has fewer mucus cells but has both small cystic component and the characteristic cells and features of mucoepidermoid carcinoma</li> </ul>
Labial minor salivary gland biopsy, c/w Sjogren Syndrome	<ul style="list-style-type: none"> <li>This specimen shows numerous and marked <i>focus scores (foci)</i> of lymphocytes in a periductal distribution in the minor salivary gland lobules</li> </ul>
Intradermal melanocytic nevus	<ul style="list-style-type: none"> <li>Nest or <i>theques</i> in the dermis which mature from larger to smaller and more neural or nerve-like from superficial to deep</li> </ul>

	<ul style="list-style-type: none"> <li>• A <i>junctional nevus</i> is characterized by nests at the junction of the epidermis and dermis</li> <li>• An <i>intradermal nevus</i> has nests in the dermis only</li> <li>• A <i>combined nevus</i> has nest at both the junction and in the dermis</li> <li>• A <i>congenital nevus</i> or a nevus with ‘congenital features’ has nests that track along hair follicles and adnexal structures</li> </ul>
Ulcer with stromal eosinophilia	<ul style="list-style-type: none"> <li>• This is the same ulcer from the early series on abnormal histology, showing the ulcer and fibrin with an underlying granulation tissue and eosinophils infiltrating between skeletal muscle fibers (often these are traumatic ulcers on the tongue)</li> </ul>
Mild to moderate epithelial dysplasia	<ul style="list-style-type: none"> <li>• There is disarray and pleomorphism and some normal and abnormal mitoses in the lower third to half of the epithelium</li> <li>• Often, mild to moderate dysplasia (in the oral cavity) can be conservatively (re)excised or followed carefully over a long term; moderate to severe dysplasias will usually require definitive excision of any clinically suspicious areas (and histologic evaluation); carcinoma in situ and invasive carcinoma almost invariably mandates complete workup (CT and/or PET imaging, evaluation for nodal or distant metastases) and unimodal to multimodal therapy (surgery, radiation and chemotherapy); carcinomas, especially those in the oropharynx/base of tongue are increasingly being found to be associated with human papillomavirus, so immunohistochemistry (a stain, <i>p16</i>, is a ‘surrogate’ for HPV and is commonly employed; in situ genetic hybridization may also be used)</li> </ul>
Squamous cell carcinoma, well differentiated	<ul style="list-style-type: none"> <li>• Juxtaposed to the previous case, this is an invasive keratinizing carcinoma with islands of abnormal squamous cells, keratin pearl formation and invasion (the surrounding ‘normal’ epithelium is shown at high magnification for reference)</li> </ul>
Verrucous carcinoma	<ul style="list-style-type: none"> <li>• This is the indolent ‘papillary’ or ‘corrugated’ carcinoma often seen as a sequella to smokeless tobacco keratosis or proliferative verrucous leukoplakia and shows the V-shaped ‘chevrons’ and keratin plugging, and otherwise ‘bland’ epithelial appearance</li> <li>• The terms <i>papillary hyperkeratosis</i> and <i>atypical verrucous hyperplasia</i> may also be used</li> </ul>