

## Oral Histopathology

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### Series 38 (10 cases)

Case	Features
BFOL, c/w focal COD	<ul style="list-style-type: none"> <li>Largely composed of mature osteocementum with 'reversal lines' and minimal background stroma</li> <li>Radiology is most helpful and in this case demonstrated a more radiopaque lesion in proximity to a posterior tooth</li> <li>Vitality testing, periapical radiograph, and clinical signs/symptoms (pain or absence of, attachment to or lack of attachment to root, expansion or not) will help exclude other BFOLs</li> </ul>
Central giant cell granuloma	<ul style="list-style-type: none"> <li>There is reactive bone that might suggest a fibro-osseous lesion, but the presence of numerous multinucleated giant cells favors the diagnosis</li> <li>CGCGs may in fact occur concurrently with BFOLs; the combination of histologies may be more suggestive of renal osteodystrophy or parathyroid disease; appropriate imaging and tests should be performed in these cases</li> </ul>
Viral cytopathic effect, c/w HSV	<ul style="list-style-type: none"> <li>An otherwise non-specific ulcer; at high magnification, the viral effects on cells can be seen – bizarre nuclei, a more glass-like appearance to nuclei, some nuclear lobation/multinucleation and bizarre cell shapes</li> </ul>
Myofibroma(tosis)	<ul style="list-style-type: none"> <li>A 'bland' spindle cell tumor usually seen in children</li> <li>Characterized by cells with elongated somewhat cigar-shaped rounded nuclei in a more basophilic ("blue") background</li> <li>The differential diagnosis includes many benign as well as aggressive or malignant spindle cell tumors and in some cases there are irregular 'stag horn' shaped blood vessels (which may suggest the diagnoses <i>hemangiopericytoma</i> or <i>solitary fibrous tumor</i>); these cases usually require close examination for mitotic activity and may also require special immunohistochemical stains (usually muscle markers)</li> </ul>
Pemphigoid	<ul style="list-style-type: none"> <li>The separation is subepithelial, suggesting an immune process directed at basement membrane components</li> </ul>
Complex odontoma and calcifying odontogenic cyst	<ul style="list-style-type: none"> <li>A 'combination' lesion consisting of enamel and dentin in a more amorphous shape (odontoma) with a cyst-like lining containing <i>ghost cells</i> and more amorphous pink to violet calcific material</li> <li>Odontogenic cysts and tumors, particularly <i>calcifying odontogenic cyst</i> and <i>adenomatoid odontogenic tumor</i>, may occur in combination with odontomas and other odontogenic lesions</li> </ul>
Glandular odontogenic cyst, by frozen section	<ul style="list-style-type: none"> <li>Distortion and a very eosinophilic appearance are characteristic of frozen specimens (i.e. a piece of tissue evaluated intraoperatively while the patient is under anesthesia); numerous mucus cells and a somewhat transitional/respiratory appearance are evident enough to make this diagnosis [but entire lesion evaluation should be performed]</li> </ul>
Glandular odontogenic cyst, by permanent section	<ul style="list-style-type: none"> <li>The formalin fixed specimen from the previous frozen case; presence of mucus cells is easier to identify, as is 'transitional' nature of the epithelium</li> </ul>
OKC (KCOT)	<ul style="list-style-type: none"> <li>Basal palisading, 4-6 cell layers, flat to corrugated parakeratin</li> </ul>
Nasopalatine duct cyst	<ul style="list-style-type: none"> <li>Respiratory type epithelium and thin bone; location (area #8-9) and vitality (vital teeth) and radiology (large radiolucency between 8 and 9) are helpful</li> </ul>