

Oral Histopathology

David E. Klingman, DMD

Diplomate, American Board of Oral and Maxillofacial Pathology

Diplomate, American Board of General Dentistry

Series 27 (8 cases)

Case	Features
Pemphigus	<ul style="list-style-type: none"> Suprabasilar (intraepithelial) acantholytic process (split occurs within the epithelium)
Pemphigoid	<ul style="list-style-type: none"> Subepithelial vesiculoerosive process (split occurs at/below the epithelial/connective tissue/basement membrane interface)
Superficial mucocele	<ul style="list-style-type: none"> Mucus accumulation noted immediately below the epithelium causing a raised lesion; minor salivary gland lobules are noted at the specimen base, with some extravasated mucus as well
Labial salivary gland biopsy, c/w Sjogren Syndrome	<ul style="list-style-type: none"> In cases such as these, the serology and presence of autoantibodies are more diagnostic; however, this case does show several <i>focus scores</i> (accumulations of 50 or more lymphocytes per 4mm² area in a periductal distribution within the salivary gland lobules)
Lobular capillary hemangioma	<ul style="list-style-type: none"> Lobules or nests of small capillaries beneath an unremarkable squamous epithelium
Smokeless tobacco keratosis, mimicking amyloid	<ul style="list-style-type: none"> There is some orthokeratosis (nuclei absent in the superficial epithelial layer with a prominent granular layer) The connective tissue takes on a very dense acellular uniform appearance arranged in 'vertical' streams; special stains in this case (Congo Red and polarization for <i>apple green birefringence</i>) and crystal violet stain failed to demonstrate the presence of amyloid This individual was a known smokeless tobacco user and pouched in the area where the biopsy was made; this represents an unusual presentation but was most consistent with the history of smokeless tobacco use (and no other elements of the patient history explained it)
Diffuse large B cell lymphoma	<ul style="list-style-type: none"> Lytic lesion of the jaw consisting of sheets of intermediate to large sized lymphocytes; immunohistochemistry highlights the B cell origin of this neoplasm ("positive" is brown and "negative: is blue/background: CD20, CD79a are B cell marker, the coexpression of CD3 and CD5 indicates an abnormal phenotype, CD10 negativity suggest this is not follicular lymphoma, cyclin D1 is largely negative ruling our mantle cell lymphoma, bcl-2 suggests malignancy over reactive, and Ki-67 is a proliferation marker, high in this case) Generally the size of a cell is compared to a lymphocyte nucleus or a histiocyte nucleus (there are a number of methods including physically measuring on microscopes that have measurement devices built into the oculars/eyepieces) Diffuse large B cell lymphoma is the second most common intraoral malignancy diagnosis made and should be considered for lytic lesions of the jaws (especially those that do not respond to conventional therapy such as periapical lesions that fail to resolve after root canal, "punched out" radiolucencies that may suggest myeloma/lymphoma, and others)
Mucoepidermoid carcinoma	<ul style="list-style-type: none"> A solid tumor mass with numerous mucus cells admixed with intermediate and epidermoid cells but still 'low grade' (compare to the <i>acinic cell carcinoma</i> in the previous series and you may see the challenge!)