Oral Histopathology

David E. Klingman, DMD Diplomate, American Board of Oral and Maxillofacial Pathology Diplomate, American Board of General Dentistry

Series 16 (11 cases)

Case	Features
Mucocele	 Oral mucosa (squamous epithelium) Underlying mucus accumulation surrounded by compressed granulation tissue
Salivary duct cyst	 Oral mucosa Underlying mucus contained within a duct lined by cuboidal to respiratory-type epithelium
Salivary duct cyst with oncocytic metaplasia	 Oral mucosa and underlying mucus contained within a duct lined by epithelium demonstrating oncocytic change (stain brightly eosinophilic); uncondensed image shows granular nature of cells Oncocytes are rich in mitochondria (recall from the special stains series that PTAH stain can be used to highlight these cells)
Oncocytic papillary cystadenoma with lymphoid stroma	 Another salivary duct cyst/cystadenoma with oncocytic changes to the epithelial cyst lining, papillary infoldings and some lymphoid elements (in the parotid, this is a Warthin tumor); uncondensed image shows granular nature to oncocytic cells as in the previous case Minor salivary glands surround the cystadenoma
Lymphoepithelial cyst	 Cyst lined by squamous epithelium; surrounding lymphoid tissue This case was from the parotid area and may be considered as a form of <i>cervical lymphoepithelial cyst (branchial cleft cyst)</i> but cases are approached with caution and careful review, since many metastatic carcinomas to the neck (lymph nodes) are cystic metastases
Cystic salivary disease in HIV+ individual	 This appears similar histologically to the lymphoepithelial cyst in the previous case; however this patient was HIV positive and these patients can develop multiple cysts
Oncocytoma arising in multifocal oncocytosis	 A single dominant oncocytic neoplasm is identified adjacent to normal parotid (this is the oncocytoma); smaller oncocytic nodules are also noted (this is multifocal oncocytosis and is commonly seen in older individuals as was in this case)
Oncocytic carcinoma	 Condensed and uncondensed images of an oncocytic neoplasm; this tumor is infiltrative, has several additional tumor nodules (seen at high power infiltrating the fatty tissue) and also at higher power nuclear pleomorphism is noted
Mucoepidermoid carcinoma, high grade	 Mucus cells are identified at high power; however the majority of this tumor is 'epidermoid' in nature and there is nuclear pleomorphism (in some cases, as mentioned in earlier series on stains, a <i>mucicarmine</i> stain may be used to highlight mucus cells in these cases)
c/w Sjogren Syndrome	 These are minor salivary glands from a lower lip biopsy; the characteristic feature is the presence of one or more foci of 50 lymphocytes seen around the duct at high power (there are multiple other clinical features as part of the diagnostic criteria as well)
Radiation-induced salivary changes	 Marked fibrosis, sclerosis within the salivary gland lobules, inflammation (mild) and fibrosis and obliteration of vascular lumens