Oral Histopathology

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Series 20 (12 cases)

Case	Features
Lichen planus (LP)	• Bandlike lymphocytic infiltrate, *exocytosis* (percolation of lymphocytes into epithelium), liquefactive degeneration of basal epithelial layer (it blurs the line between epithelium and connective tissue) • Clinical history important (in this case, striated lesions); *lichenoid mucositis* can be seen in LP, lichenoid reaction to dental materials, reaction to foods/cinnamon/topical agents and medicines, graft versus host disease (in context of bone marrow transplant), systemic lupus and other disorders
Pemphigus	• *Suprabasilar acantholytic process* (suprabasilar/intraepithelial split)
Pemphigoid	• *Subepithelial vesiculoerosive process* (split at or below the basement membrane)
Psoriasiform mucositis	• Epithelial thickening (*acanthosis*), elongated or 'test tube' shaped rete and intraepithelial acute inflammation ± acute 'microabcesses (*Munro microabcesses*) • Acute inflammation in the epithelium should raise suspicion for infectious (fungal) organisms; look for candida hyphae/spores, order PAS and GMS stains for fungus
Odontogenic keratocyst	• Basal cell palisading, 5-8 cell layers, (wavy) parakeratin
Odontogenic keratocyst	• Basal cell palisading, 5-8 cell layers, (wavy) parakeratin and daughter microcysts (increase suspicion for recurrence and *nevoid basal cell carcinoma syndrome*)
Glandular odontogenic cyst	• Numerous mucus (goblet) cells in cyst lining, focal thickening of cyst lining, and respiratory-type epithelium (apical 'snouting' and cilia) • Be suspicious for *mucoepidermoid carcinoma* and evaluate entire cyst lining and wall
Mucoepidermoid carcinoma	• Cystic and solid areas with mucus cells, mucus present in the cyst lumens, and epidermoid and intermediate cells (look for these in other cystic lesions, especially palate, jaws and lower lip)
Ameloblastoma	• *Basal palisading* (alignment of basal nuclei), *reverse polarity* (polarization of nuclei away from basement membrane toward central 'stellate reticulum'), central *stellate reticulum* which may have a squamous/keratinizing appearance in some variants such as this and some areas with anastomosing or cystic architecture • *Follicular* (well-formed nests/islands), *plexiform* (anastomosing cords), *acanthomatous* (squamous/keratinizing changes in stellate reticulum), *granular cell* (resembling granular cell tumor in the stellate reticulum) are all descriptive and have little or no bearing on diagnosis or prognosis; truly *cystic ameloblastomas* (versus *solid* architecture) may behave more like cysts but the entire lesion must be evaluated, as any solid or infiltrative component mandates wider resection or additional therapy as standard of care
Intramuscular hemangioma	• Dilated blood vessels infiltrating skeletal muscle (often seen in tongue)
Squamous cell carcinoma	• Keratinizing nests and islands invading from epithelium into connective tissue; nuclear pleomorphism and mitoses are numerous and notable
Frictional hyperparakeratosis	• Marked epithelial thickening (*acanthosis*), marked parakeratinization (nuclei present in the parakeratin layer) and surface (basophilic staining) bacteria and a macerated/irregular surface characteristic are all suggestive of frictional irritation (ex. *morsicatio buccurum* or 'cheek biting') • Important: epithelial maturation is normal and no dysplasia is noted (look carefully) • Not a bad idea in these cases to stain for fungal organisms (PAS, GMS stains)