Oral Histopathology

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Series 15 (9 cases)

Case	Features
Ameloblastoma	 Palisading (alignment) of the nuclei in the basal (outer) layer of cells in the tumor nests/islands; there is also <i>reverse polarization</i> of the nuclei away from the basement membrane (the nuclei should normally sit on a basement membrane) Some tumor islands 'anastomose' and others appear to arise/drop off from a cyst lining
BFOL, c/w COD (s/o cementoblastoma)	 BFOL = benign fibro-osseous lesion; COD = cemento-osseous dysplasia The histology is that of abnormally shaped bone and osteocementum trebaceulae and round 'cementicles' in a spindle to vascular background stroma; some areas are "maturing" and consist of dense osteocementum almost devoid of stroma (this is what happens to BFOLs like cemento-osseous dysplasia over time) A tooth (dentin and layered cementum) was part of the lesion and focally attached to the lesion, suggesting cementoblastoma
Renal osteodystrophy	 Recall that renal disease and parathyroid disease can lead to osteoclastic (giant cell) tumors of the bones including the jaws; these tumors are often <i>brown tumors of hyperparathyroidism</i> and histologically these are <i>central giant cell granulomas</i> Additionally, the lesions associated with renal disease bear similarity to some forms of ossifying fibroma and other BFOLs (as in this case) with interlacing trabeculae of osteoid and bone with variable osteoblastic rimming at the trabeculae edges and a variable spindle to vascular stroma
Palisaded encapsulated neuroma	 Also called <i>solitary circumscribed neuroma</i> this lesion is a well-defined neural lesion with a pale violet staining background and elongated cells of neural origin with elongated curvilinear to wavy nuclei and some nuclear inclusions [these lesions bear some resemblance to schwannomas and this diagnosis is often considered with this histologic presentation]
Adenoid cystic carcinoma	 Aggressive salivary gland malignancy; the hallmark features in this case are the cribriform or 'Swiss cheese' appearance to the tumor nests and the production of a variably staining uniform to bubbly extracellular matrix material present inside the cribriform formations (there are also solid and tubular forms as well; this case is predominantly cribriform in architecture)
Verrucous carcinoma	 Papillary to verrucous (wart-like) without invasive component; keratin plugging is evident (the stain here is heavily eosinophilic and likely due to variable staining characteristics the day the slides were prepared)
Lymphoepithelial cyst	 Cyst lined by squamous to cuboidal cells; surrounding lymphoid aggregates are noted; the material in the cyst lumen is keratin being digested by macrophages
Pemphigus	 An intramucosal split, the autommune reaction is against desmosomal attachments between epithelial cells, predominantly in the stratum basale and stratum spinosum; the epithelium falls apart leaving some basal cells attached to the connective tissue (a so-called 'row of tombstones') and there is marked inflammation
Verruca vulgaris	 a.k.a. "wart" (HPV 2,4,6,40) Characterized by a papillary/undulating surface and a hit of 'chevrons' (V shaped formations), marked orthokeratosis and a marked granular layer