Series 1 – Routine Oral Histology

This series consists of images of normal structures and tissue of the oral and maxillofacial complex; the number of ‘slides’ for each case is included:

- **Stratified squamous epithelium** (1) demonstrates the four layers (basal, spinous, granular, cornified)
- **(Hyper)parakeratosis** (1) demonstrates presence of nuclei in the stratum corneum
- **(Hyper)orthokeratosis** (4) demonstrates absence of nuclei in stratum corneum, prominent granular layer
- **Papillary (hyper)orthokeratosis** (1) seen in smokeless tobacco keratosis and proliferative verrucous leukoplakia
- **Parakeratinized epithelium** (1) minor salivary glands and a duct are noted
- **Parakeratinized epithelium** (1) a sebaceous element (Fordyce) granule is noted
- **Sebaceous (Fordyce) elements** (1) note the somewhat foamy cytoplasm
- **Sebaceous elements and hair** (1) specimen was from lower lip, external to vermillion
- **Melanosis (melanotic macule)** (1) the melanin is identified as dark brown granular pigment
- **Tongue dorsum** (2) several filiform and one fungiform papilla are noted
- **Foliate papilla** (2) part of Waldeyer's ring; a lymphoid follicle and taste buds are noted
- **Foliate papilla and nerve plexus** (3) the nerve plexus communicates chemical sensation (taste) to the CNS
- **Circumvallate papilla, bisected** (2) part of Waldeyer's ring; lymphoid elements are noted
- **Fibroma with vascular elements** (3) at high magnification, vascular elements and nerve are highlighted
- **Nerve** (2) first image condensed, second uncondensed (highlights muscle striations)
- **Skeletal muscle and adipose (fat)** (2) level I lymph nodes may be discovered in the floor of mouth
- **Lymp node, floor of mouth** (3) The germinal center and mantle zone are highlighted
- **Parotid gland** (1) paired glands; produce predominantly serous (watery) saliva
- **Submandibular/mixed gland** (1) the acini consist of mucus-producing cells, capped by serous demilunes
- **Mixed seromucous gland** (1) the acini consist of mucus-producing cells, capped by serous demilunes
- **Minor salivary gland** (1) predominantly mucus gland; epithelium is identified at the top of the image
- **Minor salivary gland** (3) mucus elements and duct are highlighted at higher magnification
- **Minor salivary gland + adipose** (1) commonly seen in areas such as buccal mucosa
- **Minor salivary gland + muscle** (1) example: glands of Blanden-Nuhn in the tongue
- **Respiratory-type epithelium** (2) pseudostratified ciliated columnar type; lines upper aerodigestive tract
- **Respiratory epithelium (mucin)** (2) a mucicarmine stain highlights the mucus (goblet) cells
- **Minor glands + cartilage** (1) specimen taken from nasal septum
- **Hair** (1) hair follicles and sebaceous elements highlighted
- **Solar elastosis** (1) the pale blue discoloration is the effect of sun damage
- **Developing teeth** (3) the images show epithelium (upper left) and two teeth in bud and bell stages
- **Tooth and periodontal ligament** (3) at high magnification, Sharpey's fibers attached to cementum are notable
- **Tooth apex, PDL, bone, marrow** (4) at high magnification, osteocytes in lacunae are noted; marrow elements are also identifiable in the images
- **Enamel** (1) the ‘fish scale’ appearance is evident
- **Dentin** (1) dentinal tubules are evident

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