Understand the common disorders of the upper airway and upper digestive tract (i.e., head and neck) in the usual context of:

DEGENERATIVE,

INFLAMMATORY,

and

NEOPLASTIC

...deviations of normal anatomy and histology
EVERYTHING that touches AIR (columnar) or FOOD (squamous) in the HEAD/NECK region

ORAL CAVITY

“UPPER” RESPIRATORY TRACT

EARS

NOSE

SALIVARY GLANDS
ORAL CAVITY

• TEETH/GINGIVA/ALVEOLAR BONE
• INFLAMMATORY/”REACTIVE” LESIONS
• INFECTIONS: HSV, VIRAL, FUNGI
• LEUKOPLAKIA/”HAIRY” LEUKOPLAKIA
• SQUAMOUS TUMORS: BEN/MALIG
• ODONTOGENIC CYSTS/TUMORS
“UPPER” AIRWAYS

• NOSE: Inflammation, Tumors

• NASOPHARYNX: Inflammation, Tumors

• PARANASAL SINUSES: Inflammation, Tumors

• LARYNX: Inflammation, Tumors
EARS

- DEGENERATION: OTOSCLEROSIS
- INFLAMMATION:
- NEOPLASMS:
NECK

- BRANCHIAL (cleft) CYST
- THYROGLOSSAL (duct/tract) CYST
- PARAGANGLIOMA (Carotid Body Tumor)
SALIVARY GLANDS

• DEGENERATION: Xerostomia

• INFLAMMATION

• NEOPLASMS
  – BENIGN: Pleomorphic Adenoma (aka, “Mixed” Tumor), Warthin Tumor
  – MALIGNANT: (Mucoepidermoid, Adenoid Cystic, Adenocarcinomas)
Tooth Decay (Cavities, “Caries”)

• “Processed” carbohydrates, i.e., sugars
• Bacterial (Strep. mutans, lactobacilli) acidic erosion of enamel
• Role of pH, spacing, brushing, F1
• Tartar ➔ plaque ➔ calculus = bacteria, proteins, cells
Periodontal Disease

• Bacteria
  – Actinobacillus
  – Porphyromonas
  – Prevotella

• Gingiva, periodontal ligaments, bone, cementum
“Irritation” Fibroma
PYOGENIC GRANULOMA
“Canker” sore = Aphthous ulcer
Arnault Tzanck, Russian dermatologist, 1886-1954
“Hairy” leukoplakia
NORMAL $\rightarrow$ DYSPLASIA $\rightarrow$ CARCINOMA-IN-SITU $\rightarrow$ INFILTRATING MALIGNANCY
ODONTOGENIC CYSTS/TUMORS

- INFLAMMATORY CYSTS (e.g., “Radicular” [periapical] most common)
- DEVELOPMENTAL CYSTS (DENTIGEROUS most common)
- MALIGNANT TUMORS of ODONTOGENIC ORIGIN (AMELOBLASTOMAS) (rare)
DENTIGEROUS CYST
Rhinitis/Sinusitis

• Very often allergic, a swab showing many eosinophils may prove this
• Very often associated with URI’s in general, usually viral
• Just about every organism imaginable has been implicated at one time or another, bacteria, virus, fungus, etc.
NOSE/SINUS/NASOPHARYNX
“TUMORS”

• “Polyps”---really NOT a tumor
• Angiofibroma
• Papilloma
• Plasmacytoma
• Neuroblastoma
• Nasopharyngeal Carcinoma
INFLAMMATORY “POLYPS” OF NASAL CAVITY

The INFLAMMATION/NEOPLASM LINK?
“NECROTIZING” Upper Airway Lesions

- “WEGENER” Granulomatosis
- “Lethal” Midline Granuloma
PAPILLOMA

“INVERTED” PAPILLOMA
ANGIOFIBROMA
PLASMACYTOMA
NEUROBLASTOMA (OLFACTORY) ESTHESIONEUROBLASTOMA

ROSETTE
NASOPHARYNGEAL CARCINOMA
LARYNGITIS
The Tympanic Cavity

- Chorda Tympani N. (CN VII)
- Tendon of Tensor Tympani M. (V₃)
- Incus
- Tendon of Stapedius M. (CN VII)
- Stapes
- Cut edge of tympanum
- Malleus
CERUMEN CAST
OTOSCLEROSIS
CAROTID BODY TUMOR

“balls of cells”

“zellballen”
NORMAL
ACUTE SIALADENITIS
CHRONIC SIALADENITIS
MUCOCELE
Most Common SALIVARY Gland Tumors

• BENIGN
  – “PLEOmorphic adenoma, i.e., “MIXED” tumor”
  – Warthin Tumor (PAPILLARY CYSTADENOMA LYMPHOMATOSUM)

• MALIGNANT
  – All are adenocarcinomas. Why?
   – Mucoepidermoid carcinoma
   – Adenoid cystic carcinoma
PLEOMORPHIC ADENOMA
i.e., MIXED TUMOR
PAPILLARY CYSTADENOMA LYMPHOMATOSUM
Better known as: WARTHIN TUMOR
MUCOEPIDERMOID CARCINOMA
ADENOID CYSTIC CARCINOMA