Nasopharynx
Oropharynx
Laryngopharynx
Soft Palate
Epiglottis
Esophagus

ENT
CHAPTER 16
Head & Neck (ENT)
PATHOLOGY
OTOLOGY

OBJECTIVE:
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.
ETIOLOGY
PATHOGENESIS
MORPHOLOGY
CLINICAL MANIFESTATIONS
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, Fluoride
- 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 ➔ DYSPLASIA ➔ CARCINOMA-IN-SITU ➔ 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
POLYPS

PAPILLOMAS

CARCINOMAS

Singer's node

Papilloma

Cancer on vocal cord
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
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