Headmirror's ENT in a Nutshell
Benign Parotid Lesions
Expert: Eric Moore, M.D.

Presentation (0:30)

- Symptoms
  - Masses usually found by patient ("I was shaving")
  - Pain (otalgia vs TMJ type pain)
- Concerning History for Malignancy (80% parotid masses benign, 20% malignant)
  - Growth speed (rapid)
  - Paresthesia
  - Pain
  - Facial nerve symptoms
  - Lymphadenopathy
- Risk Factors
  - No risk factors identified for majority of parotid tumors
  - Smoking → Warthin's tumor
  - Radiation → Malignant parotid neoplasms
- Physical Exam
  - Palpable mass
    - Mobile vs fixed
    - Size
    - Fingers around mass → tail of parotid instead of lymphadenopathy
      - Superficial to SCM if tail of parotid
  - Facial nerve weakness

Pathophysiology (7:22)

- Mucinous and serous acinar cells at proximal portion
  - Intercalated, striated, excretory ductal cells
- Multicellular theory: certain tumors arise from their individual cell type
- Bicellular theory: intercalated duct cells have stem cells that can different into myoepithelial components and epithelial components

Pleomorphic adenoma (most common benign neoplasm) (9:08)

- Usually slow growing mass
- Can occur in any portion of parotid gland or other major/minor salivary glands
- Lobular or multi-nodular tumor, well defined border
- Almost never any facial nerve symptoms or metastasis
- Histopathology
  - Heterogenous cell population (myoepithelial and epithelial components)
  - Can be predominately one cell type (monomorphic adenoma)
- Can de-differentiate into carcinoma ex pleomorphic adenoma
  - Estimated in 10% of all pleomorphic adenomas

Warthin's Tumor (Papillary Cystadenoma Lymphomatosum) (13:28)

- Cystic tumors
- Usually tail of parotid gland
- More common: Men> Women, >60 years old, smokers
- Bilateral or multi-focal tumors

Oncocytoma (14:42)

- Multifocal cystic masses in parotid
- FDG avidity on PET (also Warthin's)

Monomorphic adenoma (15:22)

- Can be confused as malignant on frozen section
- Behave similar to pleomorphic adenoma

Other lesions (15:48)

- Myoepithelioma
- Lipoma
- Lymph node pathology (lymphoma, reactive lymph nodes)
- Sclerosing polycystic adenosis
- Chronic inflammatory conditions
- Vascular malformations (hemangiomas)

Workup (17:30)

- <u>Imaging</u>
    - Do not have to do on every patient (especially superficial tumors that are very palpable)
    - CT scan w/ contrast
        - Information on gland thickness, vasculature, location of tumor, lymphadenopathy
    - US
    - MRI

- <u>Fine needle aspiration</u>
        - Highly accurate in diagnosis
        - Can help differentiate benign vs malignant
        - If excellent frozen section pathology, can defer this if planning on going to operating room
        - Can make tumor more sticky or disrupt integrity of capsule

Management (23:05)

- <u>Surgical management</u>
    - In the absence of patient frailty, almost all parotid tumors, including benign, are addressed with surgical therapy

- **Techniques**
  - Superficial parotidectomy
  - Partial parotidectomy or capsular dissection
    - More common several decades (abandoned due to recurrence but refuted)
    - **Proponents**: Less Frey syndrome, less cosmetic defect
    - **Opponents**: More sialocele, less appreciation of tumor capsule
  - Deep lobe parotidectomy
- **Risks** to discuss with patient
  - Recurrence
  - Facial nerve injury
  - Frey Syndrome
    - 9-12 months after parotid operation
    - Gustatory sweating
    - Flushing of face and sweating over the parotid gland
  - Cosmetic deformity
    - Not usually a problem with just superficial parotidectomy
  - Greater auricular nerve hypoesthesia / numbness
    - Typically transient, recover 9-12 months
  - Hematoma
  - Sialocele
    - Almost always resolve spontaneously
  - First Bite syndrome
    - Unopposed parasympathetic innervation
    - Not common in just superficial parotidectomy (more common in deep lobe or parapharyngeal space)
    - Self-limited, can be treated with neuropathic medication or botox