Eustachian Tube (ET) Dysfunction

- Diagnosis of ET dysfunction depends upon:
  - Subjective symptoms of aural fullness and/or ear "popping" (with or without a history of environmental allergies)
  - Careful otoscopic examination of the tympanic membrane with pneumatic insufflation to rule out effusion

Eustachian Tube (ET) Dysfunction

- Diagnosis of ET dysfunction depends upon:
  - Ruling out presence of middle ear effusion
  - Tympanogram usually will reveal reduced middle ear pressure

Middle Ear Effusion

- Diagnosis of middle ear effusion:
  - Otalgia with hearing loss
  - Otoscopic examination reveals middle ear effusion with absent movement
  - In an adult, a mass in the nasopharynx must be considered as a possible etiology

Eustachian Tube (ET) Dysfunction

- Treatment
  - Nasal steroids/saline lavage
  - Antihistamines/Decongestants
  - Insufflation of ET
  - Oral corticosteroids
  - GERD treatment
  - Middle ear ventilation tube placement (only in rare instances)
Middle Ear Effusion

- Audiogram will demonstrate a conductive hearing loss with a “flat” tympanogram

Middle Ear Effusion

- Treatment
  - Oral antibiotics
  - Oral corticosteroids
  - Middle ear pressure equalization tube (PET) placement if persists

Hemotympanum

- Bloody middle ear effusion usually secondary to trauma
- Workup should include CT scan of temporal bones and audiogram
- Blood will usually reabsorb spontaneously over 4-12 weeks
- If no resolution, PET is indicated

Tympanosclerosis (aka Myringosclerosis)

- White plaque-like deposit on tympanic membrane (TM) surface
  - Usually secondary to frequent otitis media
- No treatment necessary (unless impairment of TM mobility is noted)

Tympanic Membrane Perforation

- Occurs secondary to pressure and/or fluid accumulation in the middle ear (can be post head trauma)
- Conductive hearing loss
- Potential for otorrhea and recurrent middle ear infections

Tympanic Membrane Perforation

- Treatment should include:
  - Oral antibiotics
  - Ear drops
  - Dry ear precautions
- If perforation is small and/or post-traumatic, may spontaneously heal in 3-8 weeks without surgery
Otitis Externa

- Infection of external auditory canal (EAC)
  - Exquisitely painful
  - Severe canal edema (conductive hearing loss)
  - History of EAC trauma nearly always elicited
  - Multiple bacterial species (including Pseudomonas) are usually present

- Treatment should include:
  - Oral antibiotics with anti-Pseudomonal coverage
  - Otowick placement
  - Otic drops with anti-Pseudomonal coverage

- Higher incidence in immunocompromised populations
- If any facial nerve weakness or cranial neuropathies are present, possibility of "malignant otitis externa" (skull base osteomyelitis) must be considered

Exostosis

- Hypertrophy of the bony external auditory canal
- Secondary to chronic exposure to cold water (surfing, ocean swimming)
- No treatment needed unless near-total EAC occlusion and/or secondary conductive hearing loss
- Need for meticulous ear cleaning after water exposure

Nasal Polyps

- Inflammatory growths associated with chronic allergies
- Can cause anatomic obstruction of sinus ostia with secondary acute sinusitis
- Associated with asthma and aspirin allergy (Sampter’s triad)

Nasal Polyps

- Diagnosis also depends upon radiographic appearance of sinuses (limited CT scan)
### Nasal Polyps
- **Treatment**
  - Antibiotics
  - Oral corticosteroids
  - Antihistamines/Decongestants
  - Nasal/sinus lavage
  - Surgery
- High incidence of recurrence

### Nasal Septal Hematoma
- Usually secondary to trauma
- Not always an associated nasal bone fracture
- Needle aspiration and/or incision and drainage

### Nasal Septal Hematoma
- If hematoma is left undrained, secondary compromise of the vascular supply to nasal dorsal cartilage can result in so-called saddle nose deformity

### Mucocele
- Accumulation of mucus in submucosal space
- Most common on labial and buccal surfaces
- Usually secondary to dental trauma
- Occasional superinfection in which case surgical excision may be indicated

### Oral Leukoplakia
- "White plaque"
- Presents most commonly on lateral aspect of tongue and buccal mucosa
- Associated with trauma or chronic inflammation/irritation
- Low (less than 5%) premalignant potential

### Oral Leukoplakia
- Workup should include thorough examination of mucosa of upper aerodigestive tract (especially in tobacco-users)
- Biopsy of areas of erythroplakia more important than representative sampling
Geographic Tongue

- Asymmetric hypertrophy of papillae of tongue
- Unknown etiology
- Rarely symptomatic
- Treatment with antifungal or antibiotic therapy not indicated
- May be exacerbated by GERD

Torus Palatini and Torus Mandibularis

- Bony overgrowths present in palate and inner cortex of mandible
- Unknown etiology
- Unless overlying mucosa becomes inflamed, no treatment indicated for these benign lesions

Tonsillitis

- Infection of palatine tonsillar tissue
- Exudate in acute cases
- Chronic presence of cryptic enlargement, hypertrophy and tonsoliths (tonsil stones)

Tonsillitis

- Treatment with antibiotics for acute infections
- Oral corticosteroids if severe hypertrophy with odynophagia
- Surgical excision indicated if frequent infections, secondary airway obstruction, halitosis, or noticeable asymmetry

Tonsillar Lymphoma

- Lymphoma (usually B-cell type) that develops within the lymphoid tissue of the palatine tonsils (part of Waldeyer’s ring)
- Important to keep high index of suspicion if significant asymmetry, cervical adenopathy, constitutional symptoms

Peritonsillar Abscess

- Acute, suppurative infection with the submucosal space around tonsils
- Will always have uvular deviation, bulging of soft palate, trismus, and muffled-sounding voice
- Treatment involves either needle aspiration and/or incision and drainage with oral antibiotics and corticosteroids
- Can re-accumulate following needle aspiration
**Parotitis**

- Inflammation of the parotid ductal system with associated swelling, pain, erythema, fevers
- Increased incidence in diabetics but can occur secondary to episode of dehydration
- Rarely can occur secondary to parotid stone (sialolith)
- Treatment includes antibiotics, hydration, oral sialogogues, heat and massage directly over the involved gland

**Submandibular Sialoadenitis/Sialolithiasis**

- Acute inflammation of submandibular salivary gland
- Can be secondary to dehydration (as in parotitis) but more commonly due to sialolith (stone)
- Physical exam can often palpate stone along course of submandibular duct (within the floor of mouth)
- Treatment is same as for parotitis except that frequent infections with an associated sialolith mandate surgical excision of gland

**Parotid Neoplasm**

- Firm mass within the substance of parotid salivary gland
- Approximately 80% benign
- Presence of ipsilateral facial nerve weakness, pain, or adenopathy increase likelihood of malignancy
- Diagnostic workup should include MRI of parotid gland followed by fine needle aspiration biopsy
- Treatment involves surgical excision of gland

**Second Branchial Cleft Cyst**

- Painless, fluctuant mass in the lateral aspect of the neck that is situated deep to the sternomastoid muscle
- Most common branchial cleft anomaly (95%)
- Often becomes apparent after recent URI
- May be a connection with ipsilateral tonsil
- Surgical excision of the cyst may therefore mandate concomitant tonsillectomy

**Thyroglossal Duct Cyst**

- Most common congenital neck mass (70%)
- Elevates on protrusion of tongue or swallowing
- May develop draining sinus on skin surface
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<th>Thyroglossal Duct Cyst</th>
<th>Bell’s Palsy</th>
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| - Usually present at or just inferior to the hyoid bone  
  - may be associated with ectopic thyroid tissue (1-2%) therefore imaging to confirm the presence of normal thyroid tissue is recommended  
  - Treatment is surgical excision (Sistrunk Procedure) | - Paralysis of all branches (upper and lower) of facial nerve  
  - Sudden onset  
  - Viral prodrome (usually)  
  - Diagnosis of exclusion  
  - Must rule out presence of co-existing mastoiditis, otitis externa, parotid tumor |

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| - Likely secondary to infection of facial nerve with herpes simplex virus  
  - Treatment includes oral corticosteroids and possibly with an antiviral medication with reassessment after 7-10 days |