Inflammatory Disorders of Salivary Glands

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Acute Suppurative Sialadenitis

• Definition
  Bacterial inflammation of the salivary glands

• Clinical Findings
  – Local
  – Systemic
Acute Suppurative Sialadenitis

**Pathophysiology**

- Reduced **Body** mobility
- Reduced **Saliva** mobility

- **Staph. aureus**
  - Strep., Hemophilus, Anaerobic, gram Negative

- **Local** (retrograde)
- **Systemic** (hematogenous)

- Disease
Inflammatory Disorders of Salivary Glands

**Acute Suppurative Sialadenitis**

**Diagnosis**

- **Clinical** *(sufficient for starting management)*

- **Microbiology Culture** *(needle aspiration is better)*

- **Serum Amylase**: Normal

**Does need to Imaging?**

**If Do not respond to medical therapy in 48 –72 hrs**

**Diff. Dx**

- Lymphangitis
- External otitis
- Bezold’s abscess
- Cervical adenitis
- Dental abscesses
- Infected cysts
Acute Suppurative Sialadenitis

- **Management**
  - **Medical**: aggressive
    - Background medical disease
    - Pain manage (analgesic, warming)
    - Oral Hygiene
    - Rehydration
    - Sialogogue
    - Antibiotic
      - Co-amoxiclav ± Metronidazole
      - Cephalexin/Cefazolin ± Metronidazole
      - Vancomycin ± Metronidazole
      - Clindamycin

- **How long is Antibiotic Rx?**
  - 1 week after resolution of Symptoms
Acute Suppurative Sialadenitis

- Management
  - Surgical: Abcess Drainage
    - Rarely is necessary
- Complications: unusual
  - Facial Palsy → follow until resolution of Parotitis
Inflammatory Disorders of Salivary Glands

Mumps

• Definition
  Acute Nonsuppurative Viral Parotitis

• Pathophysiology
  Patient in acute phase
  Airborne Droplet
  2 – 3 weeks Incubation
  Prodrome in new patient
Clinical Findings
- Bilateral Swelling
- Pain (Parotid, Ear)
- Trismus
- Dysphagia
- Edema (Nonpitting) → Stretched Skin (glazy)
- No Erythema
- No Warmth
Mumps

• Diagnosis
  – Confirmation: Viral Serology
  – Lab. Findings:
    ➢ Leukopenia
    ➢ Increased serum Amylase

• Management (Supportive)
  • Oral Hygiene
  • Pain Manage
  • Hydration
  • Bed rest
  • Complications
    • No Sialogogue

• Prevention: Vaccination

Parotid Edema subsides after Several Weeks
Clinical Findings

- **Acute**
  - Acute: diffuse glandular edema

- **Chronic**
  - Chronic: discrete slow growing mass

- **Constitutional symptoms**
  - Constitutional symptoms may be absent

- **Primary infection**
  - Primary infection: mostly in Parotid

- **Secondary infection**
  - Secondary infection: mostly in Submax.
• Diagnosis
  – PPD: should positive
  – CXR: commonly negative
  – FNA: may be helpful

• Management
  – Medical: Anti TB medications
  – Surgical:
    • If uncertain about Dx
    • If not respond to medical Rx
Non-TB mycobacteria

• Clinical Findings
  rapidly enlarging persistent neck mass failed to respond to antibiotic therapy in a pediatric patient

  – Skin: violaceous discoloration

  – might progress to fluctuation & draining sinus

  – LAP : unilateral in the Level II or preauricular areas
Non-TB mycobacteria

• **Diagnosis**
  - Imaging : CT
    - unilateral LAP (ring enhancing) without subcutaneous fat stranding
  - Biopsy
  - Culture (6 weeks)

• **Management**
  - Surgical : Choice (excision)
  - **Medical** : prolonged course of Antibiotic (clarythromycin) ?????
Actinomycosis

- **Etiology**
  - *Actinomyces* (normal commensal organism)

- **Clinical Findings**
  - painless, indurated enlargement
  - chronic purulent drainage
  - development of multiple draining cutaneous fistulas
Actinomycosis

- **Diagnosis**
  - needle aspiration *or* fistula swab to examine for the presence of sulfur granules *and* the organism

- **Management**
  - **Medical:** *Penicillin*: 6-week parenteral followed by an additional 6 months of oral management
  - **Surgical:**
    - remove extensive fibrosis and sinus tracts
    - poor response to antibiotics *or* for diagnosis
### Sialolithiasis

**Etiology**: uncertain
- submandibular gland is most commonly affected

**Clinical Findings**
- recurrent episodes of postprandial salivary colic and swelling
- bimanual palpation → palpable stone
- Chronic mass

**Diagnosis**: Imaging  *or*  Sialoendoscopy

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### Inflammatory Disorders of Salivary Glands

- **Acute**
  - Infectious
  - Suppurative
  - Nonsuppurative

- **Chronic**
  - Infectious
  - Noninfectious
Sialolithiasis

Management: surgical

- Removal of Stone
  - Open approach
  - Endoscopic Approach
  - E.S. Lithotripsy

- Removal of Gland
  - Intraoral (submax.)
  - External (Parotid or Submax.)

Inflammatory Disorders of Salivary Glands

- Acute
  - Infectious
  - Suppurative
  - Nonsupp.

- Chronic
  - Infectious
  - Noninfectious
Sjögren’s Syndrome

- Clinical Findings
  - Dryness of mouth
    (difficulty chewing and swallowing and phonation, multiple dental caries)
  - Dryness of eyes
    (foreign body sensation)
  - Intolerance to acidic and spicy foods
  - Bilateral parotid enlargement
Sjögren’s Syndrome

**Diagnosis**
- Subjective Sicca
- Objective Sicca (Schirmer’s test & Lashley cups)
- Biopsy
- Serology (anti SS-A & Anti SS-B antibody)

**Management**
- Symptom management / gum or candy / pilocarpine
With Special Thanks