Reactive Lymphadenitis
“Acute & Chronic”
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Definitions

- Pathologic Lymph Node
  - >2cm in children is considered abnormal
- Acute Lymphadenopathy
  - < 2 weeks duration
- Subacute Lymphadenopathy
  - 2-6 weeks duration
- Chronic Lymphadenopathy
  - > 6 weeks duration
Etiology of Lymphadenopathy

- Acute Infectious
- Subacute
- Chronic Infectious
Acute Infectious Lymphadenopathy
Viral Lymphadenitis

- Most common form of reactive lymphadenopathy
- Common virus’ involved:
  1. Adenovirus
  2. Rhinovirus
  3. Coxsackie virus A and B
  4. EBV
- Lymphadenopathy often bilateral, diffuse, nontender
- Other Signs/Symptoms are consistent with URI
- Management is expectant but they are often biopsied due to slow regression
- Nodal architecture and hilar vascularity are normal on pathologic examination
Suppurative Bacterial Lymphadenitis

- *Staphylococcus aureus* and Group A Streptococcus

- Common history reveals recent
  - URI
  - Earache
  - Sore Throat/Toothache
  - Skin Lesions

- Management is initially with oral or IV antibiotics depending on severity of infection

- If not resolving or getting worse
  - CT with contrast and/or Ultrasound to evaluate for phlegmon/abscess/infiltrate

- FNA vs Surgical I&D vs Surgical Excision if abscess is identified
Suppurative Lymphadenitis with Overlying cellulitis
Chronic Lymphadenitis

Follicular hyperplasia
B-Cells stimulated
Large germinal centers demarcated mantle zone - follicles expand at expense of mantle zone

Follicles vary in size and shape (vs lymphoma)
- Follicular hyperplasia could be non-specific
- Or due to specific causes;
- Toxoplasmosis, rheumatoid arthritits, SLE, AIDS
- **Diffuse (Paracortical) hyperplasia**
- Expansion of T-cell regions with effacement of follicles
- Occur in viral infection, drug reaction
Sinus Pattern of Hyperplasia
Seen in nodes draining cancer
Prominence of sinusoids - distended with histiocytes
Infectious Mononucleosis

- Caused by Epstein Barr Virus

**Epidemiology**
- 50% seropositive by age 5
- 90% seropositive by age 25

**Signs/Symptoms**
- Fever
- Exudative pharyngitis
- Painless generalized lymphadenopathy
- Axillary LAD and Splenic enlargement increase likelihood
- 50% lymphocytosis with >10% Atypical lymphocytes on peripheral smear is suggestive
Infectious Mononucleosis Findings
Maculopapular EBV Rash with Amoxicillin