

# LYMPHADENOPATHY

Handout Team  
@MedxAesthetic  
@NikitaSonalIyaD

Dr. Walker Redd - Host  
@WalkerReddMD

Dr. Matthew Weinstock - Discussant  
Hematology/Oncology

Jordan Said- Script Writer  
@JordanTSaid

## Medical History

- Duration of symptoms
- Social history
  - sick contacts
  - travel exposure
    - tuberculosis endemic area
  - animal exposure
  - occupational exposure
    - silicon
    - beryllium
- Medications:
  - allopurinol
  - beta blockers
  - captopril
  - carbamazepine
  - cephalosporins, etc.
- Constitutional symptoms

## Physical Exam

- Location
  - specific distribution
  - generalized
- Size
  - non-enlarged (<1cm)
  - enlarged (>1cm)
- Tenderness
  - painful
  - non-painful to touch
- Consistency
  - hard / soft
  - rubbery
  - matted
    - infiltration
    - stromal fibrosis

## Lymphadenopathy

### Localized

Related to lymph node drainage areas

### Generalized

#### Benign

#### Malignant

#### Cervical

- EBV
- CMV
- HIV
- Toxo
- TB
- Lymphoma
- Head / Neck SCC
- Melanoma

#### Supraclavicular

- Virchow's Node
- Thoracic or Abdominal cancer
- Thyroid / larynx disease
- Tuberculosis

#### Axillary

- Infection
  - cat scratch
  - Tularemia
- Breast Cancer

#### Inguinal

- Sexually transmitted infections (STI)

#### Auto-immune

- Dermatomyositis
- Rheumatoid Arthritis
- Sjögren's

- Lymphoma
- Angioimmunoblastic T-cell lymphoma

#### Infection

- Acute HIV
- EBV
- Mycobacterial
  - disseminated tuberculosis

#### Miscellaneous

- Castleman's
- Sarcoidosis

#### Medications

- Allupurinol
- Beta-Blockers
- Anti-epileptic drugs (AEDs)



• Think: **MIAMI**

- (**M**alignancy, **I**nfection, **A**utoimmune, **M**iscellaneous, **I**atrogenic- i.e. drugs)



• **Pearl:** Many etiologies can cause localized and/or generalized LAD. Distinction is not always absolute!

## Differential Diagnosis

### Laboratory Evaluation

*\*\*actual lab selection is patient-case specific\*\**

#### General

- CBC with diff
- BMP
- Uric acid level
- LFTs
- LDH level

#### Infectious

- HIV - PPD/Tspot
- EBV
- Monospot
- Hep A, Hep B
- RPR
- Viral load
  - HIV
  - CMV
  - Hep C

#### Rheumatologic

- ANA
- Anti-dsDNA



### Diagnostic Work-Up

- **1st** - Cross-sectional imaging
  - CT Chest, Abdomen, Pelvis
  - assists with lymphadenopathy surveillance

- **2nd** - PET scan
  - define size/distribution of lymphadenopathy
  - monitor progression

- **3rd** - Confirmatory lymph node tissue biopsy

- **Excisional biopsy:** Gold Standard
  - preserves architecture
- **Core needle biopsy:** When LN is not accessible
- **Fine needle aspiration:** Less preferred
  - loss of architectural information
  - often used for thyroid nodules

**Management** Address the underlying cause of LAD!