Approach to Patients with Polyarthralgia
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Definitions
- Arthralgia – joint pain with no evidence of inflammation
- Arthritis – joint inflammation (usually with joint pain)
- Myalgia – muscle pain with no evidence of inflammation
- Myositis – muscle inflammation; usually with weakness

General Principles
- History & Physical Exam are Critical
  - Identify urgent situations
    - Monoarticular arthritis with a fever
    - Severe Systemic illness (weight loss, respiratory failure)
  - Identify Inflammatory Conditions
    - AM stiffness > 60 minutes (beware fibromyalgia)
    - Stiffness better with activity, worse with rest
    - Observed joint swelling…
  - Exclude fibromyalgia as a cause of pain and evaluate for common causes such as osteoarthritis

Laboratory Tests:
- support a clinical Impression
- Identify occult organ system involvement
- ESR/CRP Nonspecific

Indications for additional testing…
- Rheumatoid Factor and/or CCP: Clinical suspicion for Rheumatoid Arthritis
- ANA - Clinical suspicion for SLE, Sjögren's Syndrome or Scleroderma
  - Sm/RNP – Clinical suspicion for SLE and ANA is positive
  - DsDNA – Clinical suspicion for SLE and ANA is positive
  - SSA/SSB – Clinical suspicion for SLE or Sjögren's Syndrome
  - SCL-70 – Clinical suspicion for diffuse Systemic Sclerosis (Scleroderma)

Polymyalgia
- Polymyalgia Rheumatica
  - Ages 50 – 80 (F > M) w Shoulder, neck > Thigh pain
  - Beware giant cell arteritis (headache, jaw claudication, scalp tenderness, vision)
  - Elevated ESR/CRP; CK not elevated

- Polymyositis
  - Ages 30-60
  - Proximal weakness with no pain
  - CK elevated; ESR/CRP may be normal
• Fibromyalgia
  o Ages 20-60 (any age)
  o Diffuse musculoskeletal pain (muscle, joint, bone)
  o Sleep abnormalities (awaken feeling tired)
  o Strength (and CK) normal; ESR normal
  o Differential diagnosis: Sleep apnea, Depression/anxiety, Thyroid dysfunction, Hyperparathyroidism

Infection:
  o Usually monoarticular
  o Patients look sick
  o Knee is most common location
  o Beware Disseminated GC
    ▪ Young, sexually active patient
    ▪ Tenosynovitis
    ▪ Rash (small papules – patient may not know)
    ▪ Migratory joint complaints

Malignancy:
  o Systemic features
  o Night pain
  o X-ray abnormalities
    ▪ Periosteal elevation
    ▪ Focal destructive lesions
  o Osteodys trophy
    ▪ Dependent pain
    ▪ Periosteal elevation (Xray)
  o Metastatic Disease:
    ▪ Usually monoarticular
  o Carcinomatous Polyarthritis
    ▪ Spares PIPs, MCPs
  o Leukemia
    ▪ Children – asymmetric polyarticular