



# Rheumatic red flags

## Early referral improves prognosis

BY MARK HAZELTINE, MD

More than a quarter of the patients seen in the family physician's office present with some form of musculoskeletal disorder. Although most conditions can be attended to by first-line physicians, it's important to refer cases of inflammatory arthritis early on so that they can be treated aggressively. The same is true for suspected inflammatory rheumatic disorders.

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### When to refer

#### Category 1 — immediately

- contact rheumatologist either by phone or fax
- acute monoarthritis
- temporal arteritis and other vasculitis — e.g. Wegener's, polyarteritis nodosa

#### Category 2 — within 4-6 wks

- contact rheumatologist if delay is expected

- early polyarthritis, pain < 3 months
- suspected connective tissue disease — e.g. lupus, scleroderma
- polymyalgia rheumatica without temporal arteritis

#### Category 3 — < 3 months

- other inflammatory arthropathies — e.g. psoriatic arthritis, ankylosing spondylitis

### Blood work

#### Basic

- complete blood count
- creatinine, alanine transferase, aspartate transaminase

#### If the following disorders are suspected:

##### Inflammatory condition

- sedimentation rate, C-reactive protein, rheumatoid factor, protein electrophoresis; and temporal artery biopsy if temporal arteritis is suspected

##### Gout

- uric acid, synovial fluid to confirm diagnosis

##### Pseudogout

- synovial fluid analysis
- calcium and phosphorus for hyperparathyroidism
- iron and ferritin to rule out hemochromatosis
- thyroid-stimulating hormone

##### Connective tissue disease

- rheumatoid factor
- antinuclear antibody (ANA) test
- four autoantibodies — SSA, SSB, RNP, SM — for lupus or Sjögren's
- anti-DNA antibody test if ANA is positive — for lupus

##### Spondyloarthropathy

- human leukocyte antigen B27
  - usually not required if sacroiliac (SI) joint x-ray is positive
  - may be useful otherwise

### Need for speed

- confirm a serious condition — e.g. temporal arteritis, vasculitis, septic arthritis
- rapid intervention may alter the course — e.g. early arthritis, possibly rheumatoid arthritis
- initiate appropriate treatment and relief as soon as possible

### Management

#### contact rheumatologist for confirmation, follow-up

##### Acute monoarthritis

- perform joint aspiration for synovial fluid analysis and cultures

##### Temporal arteritis

- as soon as diagnosis is suspected, initiate prednisone 50-60 mg per day
- order temporal artery biopsy — it will still be positive for up to four weeks
- can also be done by rheumatologist, orthopedic surgeon or under fluoroscopy by radiologist

##### Septic arthritis

- admit to hospital
- consult with rheumatologist and microbiologist

##### Non-septic arthritis

- non-steroidal anti-inflammatory drugs (NSAIDs)
- x-rays

##### Early polyarthritis

- blood tests
- x-rays of hands, feet, etc.
- NSAID therapy
- if not responding to NSAIDs, hydroxychloroquine 6.5 mg/kg or sulfasalazine 2.0 g per day
- refer for assessment and further follow-up

##### Seronegative spondyloarthropathy

- x-rays of SI joint
- computed tomography scan if x-ray is dubious
- avoid bone scintigraphy, many false positives

### What to look for

#### Temporal arteritis

- fever, weight loss, age > 50
- recent onset of headache, particularly temporal
- jaw claudication
- loss of vision

#### Acute monoarthritis

- recent onset of pain < 4 weeks
- fever, joint swelling
- warmth, redness
- differential diagnosis
  - septic arthritis
  - crystal arthropathy
  - early rheumatoid arthritis

#### Early polyarthritis, rheumatoid arthritis

- symmetrical joint pain and swelling
- pain worse at rest, improves with activity

- morning stiffness > 1 hr
- nocturnal pain — wakes patient
- involvement of hands and feet

#### Connective tissue disease

- joint pain and swelling
- edema of the hands
- Raynaud's phenomenon
- pleuritis, pericarditis
- dry eyes, dry mouth
- differential diagnosis
  - systemic lupus
  - scleroderma
  - Sjögren's syndrome
  - polymyositis/dermatomyositis

#### Polymyalgia rheumatica

- age > 50 years, most commonly 60-80 years
- scapular and pelvic girdle pain
- wrist and knee synovitis
- morning stiffness > 1 hr

### Synovial fluid analysis

#### Joint effusion

- refer to rheumatologist or orthopedic surgeon if need be
- cellular count
  - normal: < 200 cells
  - non-inflammatory: 200-2,000 cells
  - inflammatory: 2,000-50,000 cells
  - septic: > 100,000 cells
- culture
  - gonococcal
  - non-gonococcal
- polarized microscopy for crystals
  - gout, pseudogout

For more on temporal arteritis, turn to p. 106.