

Universe of Adult Patients with Osteoarthritis of the Knee- Phase I

**a Analgesic/NSAID**

Acetaminophen shown to be as effective an analgesic as NSAIDs.

Assess risk factors for GI or Renal toxicity- if none present, use of a non-selective NSAID is appropriate. If risk factors present, add a gastro protective agent, or consider use of a Cox-II inhibitor.

Serious bleeding or renal dysfunction can still occur.

Use of Cox-II inhibitors is controversial with known heart disease or hypertension.

For certain high-risk patients, including pregnant women, NSAIDs are best avoided.

**GI Risk Factors** include:  
Age >65 ; H/O PUD or GI bleed;  
concomitant use of glucocorticoids or anticoagulants; smoking;  
Significant ETOH use;  
Comorbid medical conditions

**Renal Risk Factors** include:  
renal disease (Cr > 2.0);  
hypertension; CHF; concomitant diuretic or ACE-inhibitor

**b Treatment Response Criteria**

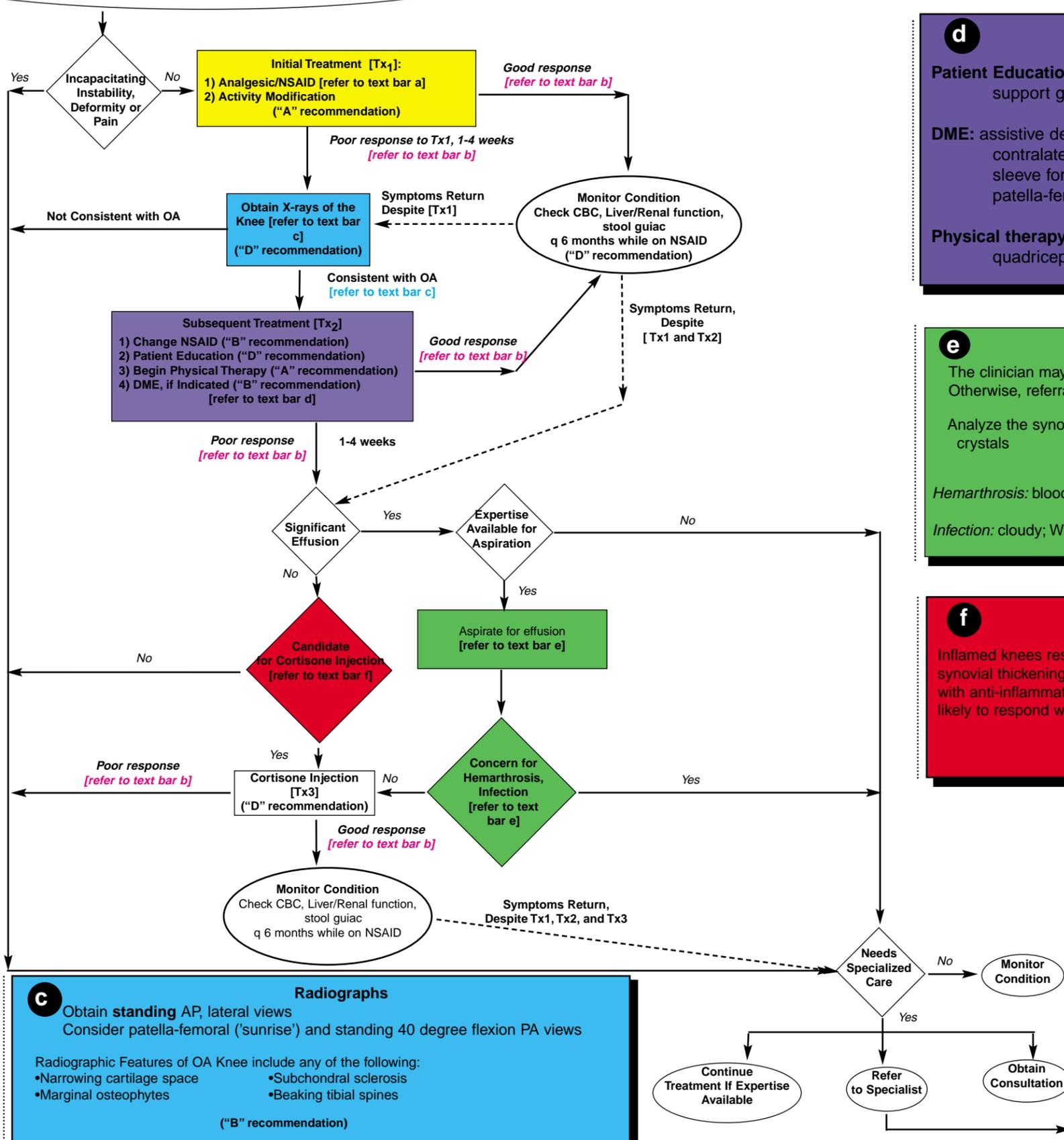
**Good:**

- Patient satisfied with outcome
- Symptoms decreasing
- Patient satisfied with progress

**Poor:**

- Patient dissatisfied with outcome
- No decrease in symptoms
- Patient unsatisfied with progress

*This orthopaedic clinical algorithm should not be construed as including all proper methods of care or excluding other acceptable methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding any specific procedure or treatment must be made by the physician in light of all circumstances presented by the patient and the needs and resources particular to the locality or institution.*



**c Radiographs**

Obtain standing AP, lateral views  
Consider patella-femoral ('sunrise') and standing 40 degree flexion PA views

Radiographic Features of OA Knee include any of the following:

- Narrowing cartilage space
- Subchondral sclerosis
- Marginal osteophytes
- Beaking tibial spines

(“B” recommendation)

**d Nonpharmacologic Therapy**

**Patient Education:** weight loss; avoid aggravating activities; support groups such as the Arthritis Foundation (“B” recommendation)

**DME:** assistive devices for ambulation (eg. cane in contralateral hand); appropriate footwear; bracing: knee sleeve for tibio-femoral OA, patella stabilization brace for patella-femoral OA; lateral heel wedges for medial OA

**Physical therapy:** exercise; muscle strengthening, particularly quadriceps; ROM

**e Knee Aspiration**

The clinician may obtain joint fluid in sterile manner if technically proficient. Otherwise, referral to a musculoskeletal specialist is recommended.

Analyze the synovial fluid for: cell count with differential; gram stain; culture; crystals

**Hemarthrosis:** bloody (ACL or meniscus tear); fat globules (occult fracture)

**Infection:** cloudy; WBC ≥ 50,000

**f Cortisone Injection in Knee Without Effusion**

Inflamed knees respond best to cortisone injection. Signs of inflammation include synovial thickening, diffuse pain, night pain, rest pain, and pain that is improved with anti-inflammatories. Localized knee pain, felt only with weight bearing is less likely to respond well to cortisone injection.

\* CONTINUE TO PHASE II