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## Canadian Family Medicine Clinical Card

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Kendal JK  
Keegan DA

# Joint Pain 1: Arthritis

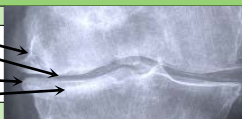
### Red Flag: Acute Red Joint - R/O Septic Arthritis

Risk Factors	Presentation	Investigations
Prosthesis, skin infxn, RA, age >80, DM, recent joint surgery or injection, IVDU	Painful joint with erythema, swelling, ↓ROM and ± fever	Clinical suspicion → joint aspiration: WBC + diff, gram stain & culture, blood cultures
R/O gonococcal infxn - ♀>♂, recent menses, age <40, ± tenosynovitis & dermatitis		

### Degenerative vs. Inflammatory Arthritis: General Signs & Symptoms

Degenerative	Inflammatory
<input type="checkbox"/> Pain is relieved by rest	<input type="checkbox"/> Pain at rest, relieved by motion
<input type="checkbox"/> <½hr AM stiffness	<input type="checkbox"/> >1h AM stiffness
<input type="checkbox"/> Localized, slow onset, progressive pain	<input type="checkbox"/> warmth, swelling, extra-articular signs

### Osteoarthritis

OA Clues	X-ray features of OA	
↑age, obesity (knee OA), joint damage, progressive asymmetric pain ± bony deformities	<ol style="list-style-type: none"> <li>1. Subchondral cysts</li> <li>2. Joint space narrowing</li> <li>3. Osteophytes</li> <li>4. Subchondral sclerosis</li> </ol>	

**Management Principles**

**Non-pharmacological:** Patient education, weight loss, regular low-impact exercise, PT (e.g. flexibility & strength, TENS) & OT (e.g. walking aids).

**Medical:** Analgesics/NSAIDs (oral &/or topical), corticosteroid injection, topical capsaicin, hyaluronic acid knee injection (controversial). No high quality studies for glucosamine or chondroitin supplements. *If refractory: surgical assessment.*

	Disease	Diagnostic Clues	Investigations & MGMT	
Inflammatory Arthropathies	Seropositive	Rheumatoid Arthritis	Symmetric, >3 joints & in hands, >6 weeks. Rheumatoid nodules (e.g. over extensor surfaces), ±↑RF & x-ray changes. ♀>♂ age ~40-50's.	If suspicion: ESR±CRP, RF, anti-CCP & radiographs. Early intervention with DMARDs*!
		Lupus (SLE)	Multi-organ involvement, diverse presentation, ♀>♂. Symmetrical, small & large joints. FHx.	ANA (Anti-nuclear antibody) (if -ve virtually R/O SLE), NSAIDs/analgesics for pain
	Seronegative	Reactive Arthritis	Asymmetric 1-4 joints, lower extremity. Usually GI or GU infection 1-4 weeks before joint pain.	NSAIDs & treat infxn. If resistant: steroids (oral & injection) → DMARDs*.
		Psoriatic Arthritis	FHx &/or presence of psoriasis, DIP involvement, enthesitis, bursitis, nail changes. Asymmetric, 1-4 joints.	Most cases controlled with NSAIDs. May require DMARDs or biologics.
		Ankylosing spondylitis	Low back pain & ↓ ROM, ♂>♀, asymmetric, enthesitis, younger age	See low back pain card
Crystal	Juvenile Idiopathic Arthritis	<16 years old, ≥1 joint, ≥6 weeks, other causes excluded (e.g. sepsis). Minimal systemic complaints. ♀>♂.	Many subtypes. Exercise, multi-discipl. team, NSAIDs, steroid inject. = 1st line.	
	Gout	1st MTP, ankle, knee, ♂ & post-meno ♀. Risks: Diuretic use, renal disease, ETOH. May mimic cellulitis.	Joint aspiration, NSAIDs, intra-articular steroids. ±Colchicine in acute gout.	
	Pseudogout	Age >60, knee joint most frequent, may resemble gout	Lifestyle Δ & ± allopurinol in chronic gout.	
*Disease Modifying Anti-Rheumatic Drugs (e.g. hydroxychloroquine, methotrexate)				

Key References: Aletaha D, et al. 2010 Rheumatoid arthritis classification criteria: an American College of Rheumatology/European League Against Rheumatism collaborative initiative. *Arthritis Rheum.* 2010;62(9):2569. Cibere J. *Rheumatology*; 4. Acute Monoarthritis. *CMAJ* 2000; 162(11): 1577-83. Hochberg MC, et al. ACR. ACR 2012 recommendations for the use of nonpharmacologic and pharmacologic therapies in osteoarthritis of the hand, hip and knee. *Arthritis Care Res* 2012; 24(4): 465-74. Klinkhoff A. Rheumatology 5: Diagnosis and management of inflammatory polyarthritis. *CMAJ* 2000; 162(13):1333-8. Margaretten ME, Kahwies J, Moore D, Bent S. Does this adult patient have septic arthritis? *JAMA* 2007; 297(13):1478-88. Shojania K. *Rheumatology*; 2. What laboratory tests are needed? *CMAJ* 2000; 162(8):1157-63. Knee radiograph. AHS Repository.