

The authors and reviewers have made every attempt to ensure the information in the Family Medicine Clinical Cards is correct - it is possible that errors may exist. Accordingly, the source references or other authorities should be consulted to aid in determining the assessment and management plan of patients. The Cards are not meant to replace customized patient assessment nor clinical judgment. They are meant to highlight key considerations in particular clinical scenarios, largely informed by relevant guidelines in effect at the time of publication. The authors cannot assume any liability for patient outcomes when these cards are used.

## Canadian Family Medicine Clinical Card

A22 2015  
www.learnfm.ca

Karram JJ  
Kendal JK  
Keegan DA

# Joint Pain 3: Lower Limb

	Hx Clues	Physical Exam	Top DDx
Hip Pain	Lateral-sided hip pain, esp. when lying on side. ♀ > ♂	Pain on palpation of greater trochanter	Trochanteric Bursitis
	Activity-related groin & hip pain. Worse with flexion/sitting	Flexion/adduction/IR = pain Decreased ROM	Femoroacetabular impingement
	Children 4-8y; ♂ > ♀; Insidious onset	± mild limp; ROM - restricted abduction & IR 1 <sup>st</sup> affected	Legg-Calve-Perthes
	Children <6y	Limp ± refusal to weight bear	Transient Synovitis
	♂ > ♀ ; 10-17y, ↑BMI	Limp; limited ROM; ± weight bear; ± knee pain	Slipped Capital Femoral Epiphysis

	Hx Clues	Physical Exam	Top DDx
Knee Pain	Acute: plant & twist mechanism of injury Degen.: Older patient	Joint line tenderness; ± effusion; ± locking & clicking (+) McMurray's test; (+) Thessaly test	Acute/ Degenerative Meniscal Tear
	Teens/young adults; runner; ↑ pain with prolonged sitting	Tender patella; (+) patellar friction test;	Patellofemoral syndrome
	Valgus force; ext. rot. injury; pop; abrupt swelling; ♀ > ♂	(+) Lachman > (+) Anterior drawer; swollen; may also be findings suggestive of MCL or meniscal involvement	ACL tear
	Pain after → during activity (e.g. jumping)	Superior patellar pole tender (quad) Inferior patella pole tender (patellar)	Patellar/quad tendonitis
	Adolescence; worse after activity	Prominence & tenderness of tibial tuberosity; often bilateral	Osgood-Schlatter's
	Acute/cumulative trauma; ++kneeling	Swelling over extensor aspect No pain on passive ROM (± full flexion)	Prepatellar bursitis
	Medial pain; ♀ > ♂; long distance runners	Severe point tenderness at anserine tendon insertion site	Pes anserine bursitis
	Hx instability; gradual onset	Possible ↑Q-Angle or leg length discrepancy; observed maltracking	Patellar maltracking
Lateral knee pain; runner/cyclist	Tenderness to palpation over iliotibial band	IT Band Syndrome	

	Hx Clues	Physical Exam	Top DDx
Foot Pain	Inferior heel pain; activity with lots of standing; more severe in morning; often recent Δ in activity/footwear	Tender along plantar fascia insertion (bottom medial side of heel)	Plantar fasciitis
	Heel pain in physically active individuals; more severe in morning	Pain, tenderness and swelling at tendon site	Achilles tendonitis

### General Management Principles

- ① Rest ② Ice ③ Activity modification ④ PT/strength building/stretching
- ⑤ Analgesics/NSAIDs (if indicated) ⑥ Steroid injection (if refractory & indicated)
- ⑦ Aspirate & assess fluid **when suspicious for septic joint/bursa** ⑧ X-ray may be warranted - **especially in child with limp** ⑨ Surgery - depends on situation

**Key References:** Solomon DH, et al. The rational clinical examination. Does this patient have a torn meniscus or ligament of the knee? Value of the physical examination. *JAMA*. 2001; 286(13):1610-20. Taunton JE, Wilkinson M. Rheumatology: 14. Diagnosis and management of anterior knee pain. *CMAJ*. 2001;164(11):1595-601. Malleson PN, Beauchamp RD. Rheumatology: 16. Diagnosing musculoskeletal pain in children. *CMAJ*. 2001; 165(2):183-8. Madden CC. Netter's Sports Medicine. (2010). Philadelphia: *Saunders/Elsevier*.