



Differential diagnosis of lesions at the knee

	Disorder	Diagnosis	Treatment
Anterior knee pain	Patellar bursitis	Inspection and palpation	Aspiration/infiltration or surgery
	Subsynovial haematoma	History of local blow Marked limitation of flexion Normal extension	Aspiration
	Suprapatellar tendinitis	Painful resisted extension Tenderness at the upper border	Deep friction or triamcinolone
	Infrapatellar tendinitis	Painful resisted extension Tenderness at the lower pole	Deep friction or triamcinolone
	Quadriceps expansion tendinitis	Painful resisted extension Lateral or medial tenderness	Deep friction
	Infrapatellar tenosynovitis	Painful resisted extension Crepitus Local tenderness	Triamcinolone
	Apophysitis	Boys between 10 and 15 years Local pain and tenderness	Rest
	Recurrent dislocation	Attacks of collapsing, swelling and anteromedial pain Positive apprehension test Decreased Q angle	Brace Tape and training VMO (Surgery)
	Patellofemoral pain syndromes	Dull pain, also during sitting Increased Q angle Hypertrophied lateral bands Crepitus during squatting	Tape and training VMO
	Patellofemoral arthrosis	Anterior pain during walking upstairs Crepitus Sometimes pain during sitting	Infrapatellar strap
	Sprain of the anterior cruciate, anterior insertion	Trauma Acute stages: capsular pattern Chronic stage: only a positive anterior drawer test	Triamcinolone

	Disorder	Diagnosis	Treatment
	Sprain of the posterior cruciate, anterior insertion	Trauma Acute stages: capsular pattern Chronic stage: only a positive posterior drawer test	Triamcinolone
Medial knee pain	Medial coronary ligament	History of rotation trauma Painful lateral rotation Local tenderness	Deep friction or infiltration
	Medial collateral ligament	History of trauma Acute cases: capsular pattern and local tenderness Chronic cases: limitation in a non-capsular pattern Painful valgus and lateral rotation	Acute: deep friction and mobilization or triamcinolone Chronic: manipulation after deep friction
	Plica mediopatellaris	Vague medial pain Sometimes twinges Painful arc Local thickening and tenderness	Triamcinolone or arthroscopic section
	Loose body	Middle-aged Twinges, usually on walking downstairs Non-capsular pattern Typical end-feel 'Sprain without a sprain'	Manipulation
	Medial collateral bursitis	Middle-aged Nocturnal pain Non-capsular pattern Painful valgus and external rotation Hardish swelling	Aspiration and triamcinolone
	Medial meniscus	Locking/manipulative unlocking Symptoms of sprained coronary ligament	Manipulation or surgery
	Medial quadriceps expansion tendinitis	Pain during exertion Resisted extension painful Local tenderness	Deep friction
	Pes anserinus tendinitis	Resisted flexion and internal rotation painful	Deep friction or triamcinolone
Lateral knee pain	Lateral coronary ligament	Rotation trauma Painful internal rotation	Deep friction or infiltration
	Lateral collateral ligament	Trauma Painful varus	Deep friction or triamcinolone (acute)
	Lateral meniscus tear	Locking and manipulative unlocking Symptoms of sprained lateral coronary ligament	Manipulation or surgery
	Lateral meniscus cyst	Pain on standing Palpable bulge on extension	Puncture (or surgery)
	Discoid meniscus	Children or adolescents Symptoms of internal derangement Arthroscopic diagnosis	Surgery
	Biceps tendinitis	Positive resisted flexion, also with an extended knee Positive resisted external rotation	Deep friction or triamcinolone
	Upper tibiofibular sprain	Painful resisted flexion, disappearing with the knee in extension	Triamcinolone at the anterior ligament

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Popliteus tendinitis	Painful squatting and walking downstairs Painful resisted flexion and internal rotation	Triamcinolone (origin) Deep friction (body)
Iliotibial friction syndrome	Runners/skiers/cyclists Sometimes painful arc at 30° Painful resisted extension and flexion Local tenderness	Infiltration or operative section
Lateral quadriceps expansion tendinitis	Painful resisted extension	Deep friction
Posterior knee pain		
Posterior cruciate ligament, tibial insertion	Trauma Painful passive extension Painful posterior drawer test Painful lateral shearing	Triamcinolone
Anterior cruciate ligament, femoral insertion	Trauma Painful anterior drawer test	Triamcinolone
Popliteus muscle	Trauma? Painful squatting and walking downstairs	Deep friction
Medial collateral ligament	Trauma Chronic stage: slight non-capsular pattern, passive external rotation and valgus	Chronic stage: manipulation
Posterior capsular strain	Trauma: hyperextension strain Chronic stage: only passive extension is painful Sometimes slight calcification on the radiograph	Triamcinolone
Popliteal cyst	Slight limitation of flexion Soft end-feel Palpation	Aspiration
Lesions of the posterior horn of meniscus	Slight internal derangement at the back of the knee	Prophylaxis or surgery
Coronary strain at the posterior part	Trauma: rotational injury After the capsular pattern has subsided: pain during internal or external rotation Palpation at the posterior part of the joint line	Deep friction
Tendinitis of the origin of the gastrocnemii	Painful tiptoe Painful resisted flexion, and internal or external rotation	Deep friction or triamcinolone
Pain in the knee		
Capsular pattern		
Traumatic arthritis	Trauma No synovial thickening	Deal with the cause
Monoarticular arthritis	Slow onset First swelling, then pain and finally slight capsular pattern Synovial thickening	Two intra-articular injections with triamcinolone
Haemarthrosis	Post-traumatic/haemophilia/spontaneous Severe and immediate pain, swelling and tenderness	Aspiration Causative treatment

	Disorder	Diagnosis	Treatment
	Rheumatoid and reactive arthritis	Polyarthritis Biomechanical changes Synovial thickening	Intra-articular triamcinolone Causative treatment
	Septic arthritis	Hyperacute arthritis Swelling, redness, tenderness and gross articular pattern	Aspiration and antibiotics
	Gout	Hyperacute arthritis Analysis of joint fluid	Aspiration (Intra-articular triamcinolone) Causative treatment
	Pseudogout	Hyperacute arthritis Calcification of cartilaginous structures Analysis of joint fluid	(Intra-articular triamcinolone) Aspiration
	Osteoarthrosis	Pain during weight bearing Cold joint No synovial thickening Crepitus	No conservative treatment Surgery
Non-capsular pattern	Loose body complicating osteoarthrosis	Twinges Moving pain 'Sprain without a sprain'	Manipulation
	Osteochondritis dissecans	Teenager Sudden locking in extension Post-traumatic arthritis (Positive Wilson's sign?)	Surgery
	Impaction of ruptured anterior cruciate	Trauma Positive anterior drawer test Limitation of extension	Surgery
	Intra-articular adhesions	After surgery or an atypical sprain Progressive and painless limitation of flexion Normal extension	Manipulation
	Posterior horn lesions of the menisci	Slight twinges Symptoms of internal derangement Slight limitation of flexion	Manipulation or surgery