

Knee Examination

Prepare patient

- Introduction
- Position with knees & thighs exposed

General Principles of Joint Exam

Check if any pain, then look, feel, move, measure & compare with other side, & assess function.

Look

General inspection

- Obvious other joint disease

Knees

- Quadriceps wasting
- Skin - Scars, swelling
- Deformities - incl fixed flexion (look for gap under knees when lying down), valgus (e.g. RA) or varus (e.g. OA)

Feel

Quadriceps bulk

Warmth, swelling over knee

Patellar tap for large effusion (compress suprapatellar bursa with other hand)

Bulge sign for small effusion (compress suprapatellar bursa with one hand and run other hand up lat & medial sides of knee looking for fluid wave on opposite side)

Joint line tenderness

Move

Passive movements: Place a hand over the knee & note any crepitus & ROM.

- Flexion (135°)
- Extension (5°)

Active flexion/extension of knee - look for subluxation of patella

Ligament laxity:

- Med/lat collateral ligaments ($\leq 5^\circ$). Stress at 30° .
- ACL ($\leq 5-10^\circ$): Lachman: (95% sens, knee flexed $\sim 30^\circ$, distal femur fixed & proximal tibia pulled anteriorly - intact ACL should stop with "firm endpoint"), Pivot shift (75%). Anterior draw (60%)
- PCL ($\leq 5-10^\circ$): Posterior draw, Godfrey's sign (affected tibia sags when supine if legs passively lifted into 90° flexion at hip & knee.)
- Meniscal: Bragard's (point tenderness along jt line), McMurray's test

Patellar apprehension test if recurrent patella dislocation suspected:

- Push patella laterally whilst flexing knee. Stop if patient's face shows apprehension (impending dislocation)

Reposition patient prone

Check popliteal fossae for Baker's cysts (knees extended)

Can perform Apley's grind test (not sens/spec) in this position for meniscal tear (fix thigh, flex knee and rotate leg by pressing down & turning foot - clicking of pain make test positive)

Function

Ability to stand from sitting position with arms folded.

Gait

