Orthopaedic Knee Examinations

INTRODUCTION
Hello my name is…. Is it okay if I examine your knee? Do you have any pain in your knee? If at any stage I cause you any discomfort please let me know.

Inspect for:

1. Foot wear - check there for a heal raise used to compensate for a leg length discrepancy
2. Walking aids

With the patient standing inspect skin, soft tissue and bony alignment (move around the patient):

Front: Scars, quads muscle wasting, coronal alignment of lower limbs (varus / valgus)
Side: Scars, fixed flexion deformity (FFD)
Back: Scars, muscle wasting

Gait:

Antalgic gait
Varus thrust
Trendelenberg
Foot drop (slapping)

POSITION 1 -Sitting over edge of couch with knee at 90 degrees ask patient to extend knee:

1. Observe patella tracking (straight or J shaped)
2. Repeat with a hand on the patella to palpate for crepitus (due to chondral weal in patella femoral joint which may or may not be painful)

POSITION 2 - Ask patient to lie on couch with legs extended
Check leg lengths - square pelvis by identifying ASIS and check medial malleoli align to check leg lengths are equal

- Check knees extend fully (note full extension or FFD)
- Effusion (sweep test)
- Feel for temperature (back of hand)
- Assess passive knee flexion (use goniometer if there is one)
- Check for irritability of the hip (by performing hip internal rotation in hip flexion)

POSITION 3 – Lying on couch with knee flexed to 90 degrees
With knee flexed to 90 degrees:

Inspect for posterior tibial sag (PCL deficiency – traumatic rupture or developed deficiency due to rheumatoid)

Rest thigh on foot (and tell patient this is what you are doing) and palpate:

1. Tibial tuberosity
2. Patella tendon
3. Medial joint line
4. Lateral joint line

5. Popliteal fossa

Special tests:

Anterior draw +/- Lachman (15 degrees of flexion) for ACL
Collateral ligaments
McMurrys test for meniscal pathology

Thank the patient.

“To complete my examination, I would like to, perform a through neurovascular examination and inspect AP and lateral radiographs of the knee.”

Other options:

“If I am concerned about a ligament injury or cartilage injury (meniscus or chondral cartilage, I would request an MRI scan”