Knee Examination

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Lesson Plan

Objectives:

1. To be able to examine the knee and differentiate from the following causes of knee pain
   - Tibiofemoral osteoarthritis
   - Patellofemoral joint pain
   - Meniscal damage
   - Cruciate ligament damage

2. To be able to perform a quick biomechanical assessment of the lower limb.

Knee History

- Patellofem joint pain anterior, worse on climbing stairs/getting out of car/getting out of chair after period sitting (Theatre Sign)
- Meniscal tear usually acute twisting injury (football). Acute pain and swelling which settles. Locking or giving way
- Cruciate tear traumatic eg twisting injury. Acute swelling. Knee feels unstable to patient
- Tibiofemoral OA. Crepitus, pain on movement, occasional night pain.

Knee Examination:

- Inspection of the knee for scars, deformity, swelling
- Palpate for an effusion using patellar tap or bulge tests
- Feel for joint crepitus.
- Feel along tibiofemoral joint lines for tenderness
- Feel along patellar tendon for tenderness
- Clarkes test for patellofemoral joint pain. Pressing down and inferiorly against patella whilst patient tenses quads muscles. This should reproduce anterior knee pain.
- Anterior draw test for anterior cruciate ligament tear/laxity
- Active and passive knee flexion/extension. Look for hypermobility or fixed flexion deformity

Biomechanical Assessment:

- Look at patient standing for knock knees or bow legs.
- Assess gait
- Look at feet for pes planus and rear foot eversion (together with bow legs a risk factor for patellofemoral joint pain)
- Look at footwear for wear pattern on sole.