

**Clinical Guideline:** Acute Knee Pain Site: FPH

* Trauma- what happened? Mechanism of injury? Foot planted with knee rotated and sound of a pop may indicate ACL rupture.
* Direct blow causing a valgus injury may indicate MCL sprain
* Either of above may cause meniscal tear.
* Did the knee swell immediately, gradually or not at all? Rapid swelling (2hrs) indicates an haemarthrosis which may be due to an ACL rupture or patellar dislocation. Gradual swelling (6-24hrs) suggests an effusion which may be due to a meniscal injury.
* Does the knee lock or click? This could be due to a loose body or meniscal tear?
* Has the knee improved (over 6 weeks) but still gives way occasionally. Suggests an ACL rupture or patello-femoral muscle weakness (patellar subluxing).
* Has the patient had a previous meniscectomy? They are likely to have early arthritis in the compartment rather than another meniscal tear in the remnant.

History

General Information

Common knee injuries that can lead to acute pain are:

* Meniscal injuries
* Collateral ligament injuries
* Cruciate ligament injuries
* Acute patellar trauma- fracture or dislocation
* Patellar tendon rupture

Patients in their 40s-50s may develop a degenerate meniscal tear with little trauma, especially after deep squatting. In this age group early medial compartment arthritis will mimic a meniscal tear.

* Sit the patient up on a couch, legs out straight.
* Check both knees fully extend. Roll legs side to side to exclude hip pain.
* Check for an effusion-if patient pyrexial and unwell may have a septic arthritis, quadriceps muscle wasting, scars around the knee indicating previous surgery, especially open mensicectomies.
* Check for ROM (-3 degrees - 140 degrees) and compare sides and feel for crepitus in patello-femoral joint.
* Examine for tenderness along medial and lateral joint lines in 90 degrees flexion.
* Tenderness on the joint postero-medial may indicate a tear of the posterior horn of the medial meniscus.
* Check the collateral ligaments in 30 degrees flexion by applying a varus and valgus force. Check the ACL in 20 degrees flexion by performing the Lachman test. Compare the knee with the asymptomatic knee.  (The above tests are best done by resting the patients’ knee on your own flexed knee). Unable to include Differential Diagnosis

Examination

X-ray knee (AP standing and lateral)

Investigation

Referral Guidelines – red flag signs

**Consider referral if:**

* Patient with a good history of a recent sporting knee injury, with a swollen knee or a knee they are unable to straighten or bear weight through should be sent for an urgent out-patient appointment to a knee surgeon. X-rays are not required with referral.
* Patients with a knee that gives way chronically when pivoting or side-stepping following an old injury should be sent for an MRI scan. If the scan confirms an isolated ACL injury and they wish to play sports, they should be referred for surgery. Patients who do not wish to undergo surgery or are not committed to a year long rehabilitation program should be referred to local physiotherapy only, unless they also have a symptomatic meniscal tear, in which case they should be referred for surgery. However, patients under 30 who have an ACL rupture should be referred for surgery which aims to stabilise the knee and delay the onset of pre-mature arthritis.
* Patients with true intermittent locking should be sent to Secondary Care. They should have x-rays performed (AP standing and lateral) to exclude a loose body and an MRI to exclude a meniscal tear.

Advice and Treatment

Patients with X-ray appearances of early medial compartment arthritis should be referred to physiotherapy. If symptoms fail to improve over 6 months they can be referred to Secondary Care.