



MRI of the knee for meniscal and anterior cruciate ligament tears

MBS item description

Referral by a medical practitioner (excluding a specialist or consultant physician) for a scan of knee following acute knee trauma for a patient 16 years or older with:

- **inability to extend the knee suggesting the possibility of acute meniscal tear** (R) (K) (Contrast) (Anaes.); or
- **clinical findings suggesting acute anterior cruciate ligament tear** (R) (K) (Contrast) (Anaes.)

MRI of the knee joint can lead to improved health outcomes by reducing (or eliminating) the need for diagnostic arthroscopy.

In the majority of cases, clinical examination is as good as MRI for diagnosis and management planning.

MRI plays a role when the diagnosis is unclear and the level of patient disability or pain is such that surgery is being considered.

About acute knee presentations

Acute knee presentations are diagnosed by history, physical examination and plain X-ray (where indicated for suspected bony injury). Urgent further imaging is rarely indicated.

Re-examination after a period of conservative management is recommended and imaging may then be considered if it is likely to alter ongoing management.

The Lachman test is effective for assessing anterior cruciate ligament (ACL) integrity. The Thessaly test at 20° of knee flexion is an effective first-line screening for meniscal tears.

Careful evaluation by an experienced examiner not only diagnoses ACL and meniscal tears as well as MRI does. It also identifies patients with surgically-treatable meniscal and ACL tears with equal (of better) reliability than MRI.

It is important to note that not all meniscal and ACL tears require surgery. Rehabilitation is suggested as the primary treatment option for young adults following an acute ACL tear. more than half of meniscal tears will settle with conservative management.

Acute knee presentations and MRI

MRI should be confined to more doubtful, difficult and complex knee injuries.

For these sorts of presentations, MRI is an alternative to diagnostic arthroscopy and allows better treatment planning.

MR imaging of the knee can give both false positive and false negative results, especially with meniscal injuries.

Incidental findings, especially of the meniscus, are common and increase with age. Up to 90% of middle-aged and older people with no X-ray evidence of osteoarthritis have been shown to have knee abnormalities on MRI.

As many acute knee injuries settle over time, imaging may only reveal self-limiting injuries in some cases. MRI cannot determine the natural course of each injury.