

Arthroscopy & Meniscectomy

The Menisci

The menisci are two c-shaped cartilaginous structures interposed between the femur (thigh bone) and the tibia (shin bone). The outer one is called the lateral meniscus and the inner one is called the medial meniscus. The main function of the menisci is load absorption. Their secondary function is to augment the stability of the knee.

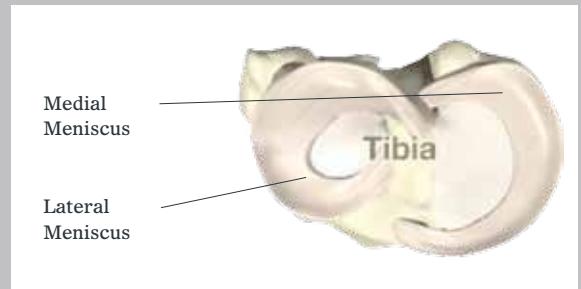
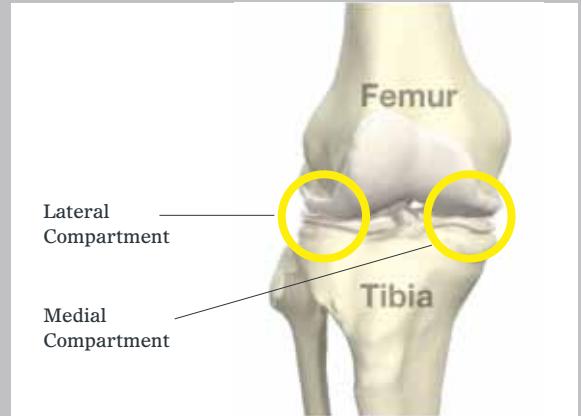
Mechanism of Injury

There are two types of meniscal tear:

- **Traumatic tears** result from a sudden high load being applied to the knee. This commonly occurs after a twisting injury.
- **Degenerative tears** are due to mechanical failure of the menisci. As you grow older the menisci become less elastic and may fail under minimal trauma (such as just getting down into a squat). Sometimes there is no history of injury.

Signs and symptoms

- **Pain** is the most common symptom of a torn meniscus. The pain is typically felt along the joint line. Any twisting, squatting or impact activity will pinch the tear and cause pain.
- **Swelling** may occur. Typically, the swelling appears the following day after injury.
- **Locking** occurs when a fragment of torn meniscus gets caught in the hinge mechanism of the knee. This will result in incomplete straightening of the leg.



Rationale for treatment

The menisci are relatively avascular structures (poor blood supply.) The clinical importance of this is that surgical repair of the menisci is only recommended for some peripheral tears where the blood supply will aid healing.

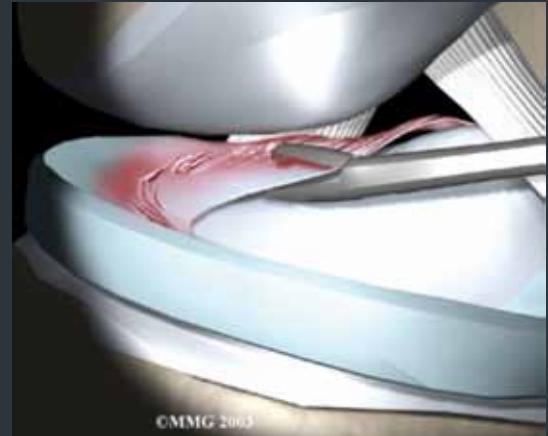
The common situation is that a tear will not heal and will therefore need to be excised.

If the knee is locked and cannot be straightened out, surgery may be recommended more urgently to remove the torn portion that is caught within the joint.

Surgery

Arthroscopy is the surgical visualisation of a joint using a narrow telescope. An arthroscopy of the knee is "keyhole" surgery.

When the meniscus can be repaired sutures are placed around the tear (meniscal repair). The more common scenario is the arthroscopic removal of the damaged meniscus (meniscectomy).



Removal of torn Meniscus



Arthroscopy

What is involved for you as a patient?

Operative Day

- Healthy patients are admitted on the day of surgery.
- You will be assessed by your surgeon and consented for surgery. This provides an opportunity for any further questions that you may have.
- After the operation you will be allowed home when you are comfortable.

Post operative instructions following a Meniscectomy/Excision of tear. Your surgeon will visit you postoperatively and explain your surgery.

- Keep the wound dry for 7-10 days.
- Use of ice packs is recommended 10-15 mins x3 daily to relieve swelling.
- Analgesic (pain relieving) medication should be used as prescribed, particularly in the initial post-operative period.
- Crutch use is usually unnecessary and full weight bearing may be undertaken as tolerated.
- Occasionally nylon skin stitches may be required. These require removal 7-10 days post insertion at your local GP surgery. Dissolvable sutures, deep to the skin, require no further attention. Paper stitches and adhesive dressings should be left in situ until they detach naturally.

Return to work following Meniscectomy

- Desk work at 2-10 days.
- Manual Work at approximately 3-6 weeks.

Return to driving following Meniscectomy

- Driving is permitted when you are able to walk comfortably and you are in safe control of your vehicle.

Return to sport following Meniscectomy

- This will be determined by the extent of damage to your meniscus and the amount of meniscus that required removal or repair.
- Training may often be recommenced at approximately 4 weeks after surgery.

Post operative instructions following a Meniscal repair

- The meniscal repair MUST be protected to allow full healing of the cartilage and prevent failure of the repair.
- During the first 4 weeks following surgery it is necessary to be kept partial weight bearing (about 25% body weight) with 2 crutches.
 - During the first 6-weeks you should avoid deep squats, running, hopping, skipping or jumping
 - Only at the 3-month post-op mark, should you start gradually and carefully returning to running and gentle sport.

As with any surgery there are potential risks involved. The decision to proceed to surgery is made when the advantages of surgery outweigh the potential disadvantages.

Local Complications

Infection	Surgery is carried out under strict germ free conditions in an operating theatre. Despite this infection occurs in 1 in 300 people. This may require further surgery and prolonged antibiotic treatment.
Clots in the leg (Deep venous thrombosis)	Although rare, this complication can be fatal if a clot travels to the lungs (Pulmonary embolism). Previous or family history of clots should be brought to the attention of the surgeon prior to your operation.
Numbness around the wound	Numbness at the side of the incisions can occur. This may be temporary or permanent.
Stiffness of the knee	Stiffening of the knee due to swelling causing difficulty in walking and pain on movement. Rarely some stiffness may be permanent.
Damage to structures around the knee	This is an extremely rare complication that can require further surgery.
Continued pain/locking	Even following arthroscopy some patients have ongoing pain or similar symptoms to those they had prior to surgery.

Medical Complications

Anaesthetic risks	Allergic reactions to medications can occur.
General complications	Following or during surgery there is risk of cardiac or respiratory complications. These risks are increased if you have current medical problems.

You must not proceed to surgery until you are confident that you understand this procedure, particularly the complications.