KNEE ARTHROSCOPY

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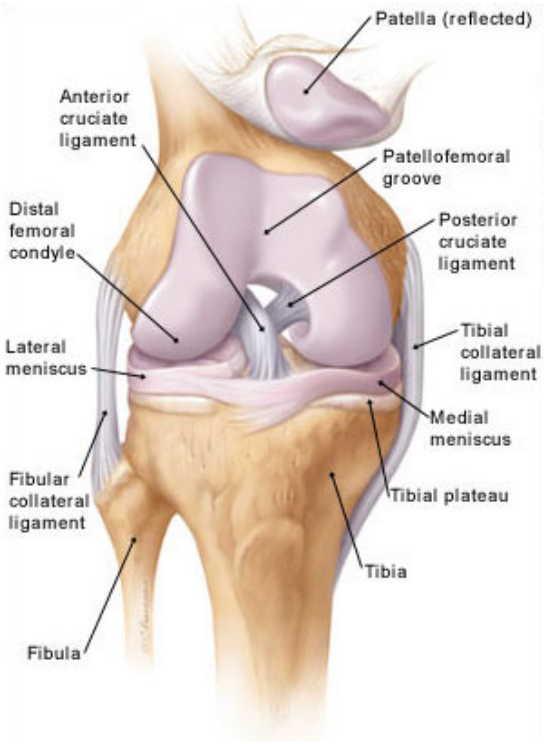
Arthroscopic Knee Surgery

Through very small holes an arthroscope, which is a very small telescope, can be inserted in to the knee to look inside. By introducing very small mechanised implements through the small incision a wide range of surgery can be performed. In general this leads to a much more rapid recovery than other techniques using larger incisions.



Meniscal Cartilage

The lateral and medial menisci provide a cushioning effect within the joint. Once you have injured your knee and torn your cartilage (meniscus) unfortunately in the vast majority of cases it does not heal and usually has to be removed or repaired as it tends to irritate the joint and cause further damage. If the tear is on the peripheral edge of the meniscus, it can sometimes be repaired and heal back *(meniscal repair)*, which is the preferred treatment. In the majority of cases however, the tear occurs in an area of relatively poor blood supply and therefore is not suitable for repair. Thus the damaged portion of the meniscus must be removed *(meniscectomy)*.

Articular Cartilage

Articular cartilage is a very smooth layer of cushioning tissue that covers the ends of the bones in all the moving joints of the body. In the knee joint it covers the lower end of the femur and the top of the tibia. The surfaces can become rough or abraded and in severe instances complete loss of articular cartilage can occur.

A *chondroplasty* or *debridement* of the damaged articular cartilage is usually performed to clean up the damaged area to help the knee glide more easily and reduce pain.

When severe damage (full thickness articular cartilage loss) is limited to a small area it may be suitable for *osteochondral micro-fracture or grafting.* A longer hospital stay will be required for this procedure.

Synovium

The inner lining of the knee is called synovium. Rheumatoid arthritis and other diseases can cause the synovium to overgrow and proliferate abnormally. Synovitis can cause pain, swelling and actually destroy the articular cartilage. Sometimes this synovial tissue is best removed *(synovectomy)* and can be performed arthroscopically. A longer hospital stay may be required for this procedure.

Ligaments

Ligaments are strong tissue bands that stabilise the knee. Twisting or severe injuries may stretch or completely rupture the ligaments. Repair of some types of ligament injuries is sometimes necessary, at other times physiotherapy is required. In some instances, such as a rupture of the anterior cruciate ligament, a reconstruction of the ligament utilising tissue from elsewhere in or around the knee is often necessary. Sometimes problems may arise in the patellofemoral joint in that the knee cap does not stay centrally located in the groove on the femur. To improve this "tracking mechanism" re-alignment of the patella by *lateral release* and or *tendon transfer* may be necessary.

Expectations

It is not possible to make a damaged knee perfectly normal. It is possible to improve the internal mechanics, stability, or alignment of the knee. Surgical procedures are intended to relieve the pain and make the knee more dependable. They are not intended to, and cannot, restore 100% normality.

- Surgery is usually performed under a general anaesthetic, however if you have had problems with general anaesthesia or would prefer to avoid a general anaesthetic other alternative types of anaesthesia are available. Please discuss this with your surgeon and anaesthetist prior to admission.
- Depending on the surgery a small drain tube is sometimes placed in the knee so that unwanted blood does not accumulate and inhibit recovery. This will be removed before you go home.
- Incisions are usually closed using Steristrips, which are small pieces of tape. Occasionally either an additional dissolving stitch or removable stitch may be used.
- The outer bandage may be removed after three days (unless otherwise instructed) leaving the sticky dressing over the Steristrips in tact. You may then shower and bathe as normal. You may be given a compression bandage and an ice-wrap to help minimise swelling. Keep the Steristrips in place for 10 days and keep the wounds dry and clean.
- Most patients will require crutches to go home and these are usually for comfort during the first two or three days. You will be given specific instructions if you are required to use crutches for longer.
- Whilst in hospital a physiotherapist will instruct you as to the use of crutches and an appropriate exercise regime to regain function of your knee.
- Time off work varies according to the type of surgery and your occupation.
- Time taken to return to normal sporting activities also varies, but for the most common procedures is somewhere between 6 to 8 weeks.
- A prescription for analgesia and sometimes antibiotics will be provided before discharge.
- A post-operative appointment will be made for you about 10 – 14 days after the procedure.

COMPLICATIONS

- Generally knee arthroscopic surgery is a very safe procedure and complications are not common.
- Anaesthetics always involve some kind of risk but these are statistically minimal.
- Infection of the wound can occur, despite precautions being taken. This is usually easily treated with antibiotics. However sometimes the infection gets into the joint and this may require further arthroscopic surgery.
- A blood clot (thrombosis) may form in the veins in the legs. This can cause persistent swelling of the foot and ankle and can be dislodged and carried to the lungs, resulting in chest pain and breathing difficulties. Once again, the risk is low and precautions are taken to reduce this. Gentle movement of the ankle (up and down) minimises the pooling of the blood in the lower limb and should be commenced as soon as possible after surgery

RECOVERY TIMES

	Meniscectomy Debridement	**Meniscal Repair Synovectomy Lateral Release**	**Osteochondral Micro-fracture Osteochondral Grafting**
Hospital stay	Day Case	Day Case	Day Case or Overnight
Rest & elevation	2 days	2 wks	2 wks
Crutches	2 days as required	2-6wks	2-6wks
Weight bearing			
- None	Can weight bear as tolerated	2wks	1-2wks
- Partial	straight away	4wks	2-6wks
- Full		6wks	2-6wks
Rehabilitation			
- ROM Exercises	Immediate	2wks	Immediate
- Strength exercises	2 wks	4-6wks	2 wks
- Training	2-4 wks	6-12wks	6-12 wks
- Sport	6 wks	3-4 mths	3-4 mths
Swelling	4-6wks	6-12 wks	6-12 wks
Time off work			
- Seated	1-2 wks	2 wks	2 wks
- Standing	2-4 wks	6-12 wks	6-12 wks

This brochure is a brief overview of the surgical management of knee arthroscopy and not designed to be all-inclusive. If you have any further questions, please do not hesitate to contact your surgeon.