

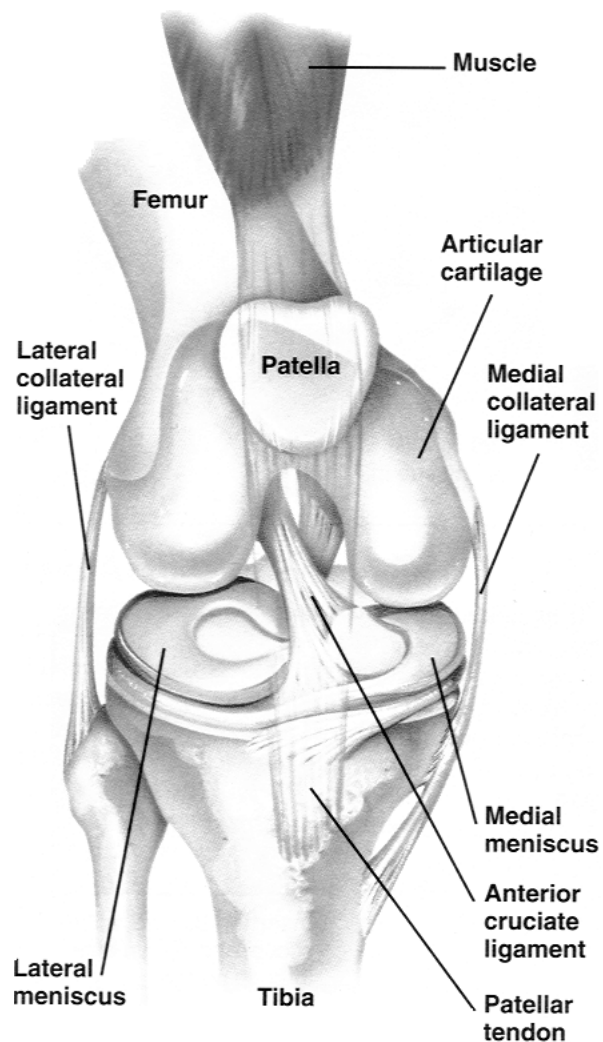
# Knee Arthroscopy

## What is knee arthroscopy?

Knee arthroscopy is a surgical procedure used to visualize, diagnose, and treat various problems inside the knee joint. This is done through small incisions that allow the insertion of specialized instruments. The arthroscope is a pencil-sized tool that contains magnifying lenses and a fiber optic light. This is attached to a small camera that projects a clear image of the joint on a monitor, allowing your surgeon to see all the structures inside your knee.

## Understanding your knee.

Your knee acts like a hinge joint connecting your thigh bone (femur) to your shin bone (tibia). Lining articular cartilage covers the ends of the bones and underside of the kneecap, and helps the joint glide smoothly. The meniscus is a horseshoe shaped pad of cartilage that functions as a cushion or shock absorber between the bones. Ligaments are rope like structures that hold the joint together and provide stability. There are 4 main ligaments in your knee, 2 outside the joint (medial and lateral collateral ligaments), and 2 inside the joint (anterior and posterior cruciate ligaments). The muscles around the knee provide strength and power, and also help stabilize the joint. Tendons are the specialized ends of the muscles that connect them to bones.



## Why do I need arthroscopic surgery?

Arthroscopic knee surgery is used to treat a variety of common knee disorders, including meniscus cartilage tears, anterior cruciate ligament tears, articular cartilage wear, and patella problems.

### Common Knee Problems

#### **Meniscus Cartilage Tears**

A sudden twist or repeated squatting can tear the meniscus. This may cause your knee to hurt or swell. Your knee may also catch or lock when you bend it.



Removing a torn meniscus

### Common Treatment Options

#### **Meniscus Removal or Repair**

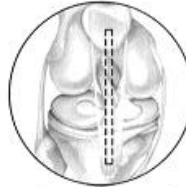
Your surgeon may remove or repair damaged tissue, depending on its location. Torn tissue on the inside of the meniscus is usually removed. Torn tissue on the outer edge of the meniscus is often repaired because it receives enough blood to allow proper healing.



Repairing a torn meniscus

#### **Ligament Tears**

A fall, twist, or direct blow may tear the anterior cruciate ligament. Tears can cause pain and swelling, as well as instability, which can make your knee give way.



Removing the graft

#### **Ligament Reconstruction**

Your surgeon can reconstruct an injured anterior cruciate ligament. This is done by replacing the damaged tissue with healthy, strong tissue (a graft) taken from an area near your knee. Usually, a section of the patellar tendon is used. In very rare cases, a ligament may be repaired if it is only slightly damaged.



Attaching the graft

#### **Articular Cartilage Wear**

Aging or injury may wear away articular cartilage. A piece may even break off in the joint (called a loose body). Damage to cartilage may cause pain, stiffness, or grinding.



Shaving cartilage

#### **Cartilage Shaving or Removal**

Your surgeon may use an instrument or laser to remove rough articular cartilage. If the cartilage has worn away, exposing the bone beneath, your surgeon may burr or drill the bone to try to stimulate cartilage growth. If a loose body or other debris is present, your surgeon may insert an instrument through a portal to remove it.



Removing a loose body

#### **Patella Problems**

Aging, overuse, or a direct blow may damage the cartilage under your patella, restricting joint movement. Structural problems, such as an off-center patella, may cause uneven wearing or pain.



Side view



Shaving cartilage

#### **Patella Smoothing or Realignment**

Your treatment will depend on whether you have a wear-and-tear or a structural problem. To smooth the patella, your surgeon may shave or use a laser to remove bands of cartilage under your patella. If your patella is off center, your surgeon may clip, or release, bands of tissue (called a lateral release) to realign your patella.



Realigning the patella

## How is arthroscopy performed?

Arthroscopy is typically performed in an outpatient surgery setting. The type of anesthesia used is up to the patient, surgeon, and anesthesiologist, but the procedures can often be done under local anesthesia. Two small incisions, each the size of a dime, are needed to insert the scope and any necessary instruments. The joint is filled with sterile fluid to improve visualization. Most procedures take less than one hour to perform. Partial weight bearing with crutches is recommended for the first few days after surgery, then walking as tolerated is allowed.

Elevation, icing, and anti-inflammatory medications will help decrease pain and swelling. The knee should be kept dry when showering for the first 3 days by placing a bag over the leg. After this, simply change the band-aids after bathing. Patients usually begin light exercise in 1 week.

Return to full activities may take several weeks to several months depending on the procedure performed.

### **What are the benefits of arthroscopic surgery?**

Benefits of arthroscopic surgery compared with older open surgical techniques include:

1. Minimal scars.
2. No overnight hospital stay.
3. Decreased pain and swelling.
4. Improved motion.
5. Quicker functional recovery.
6. Fewer risks and complications.

### **Risks and Complications**

Complications from arthroscopic surgery are extremely rare, and include bleeding, infection, blood clots, nerve or blood vessel injury, and the need for further surgery. The most common reason patients experience some persistent discomfort after arthroscopic surgery is from underlying damage to the articular or lining cartilage of the joint (early arthritis).

**Your sports medicine surgeons at Lower Limb Surgery have performed thousands of knee arthroscopy procedures. As our patient, you can be assured of the best possible treatment available today.**