

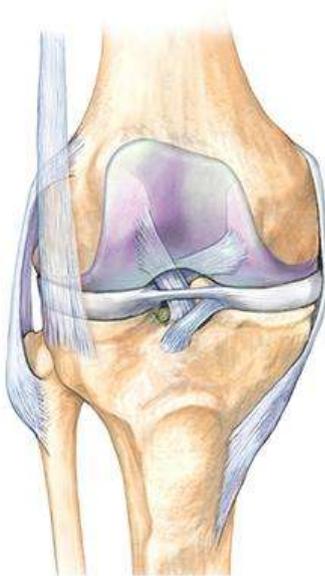


## KNEE ARTHROSCOPY

If you have persistent pain, catching, or swelling in your knee, a procedure known as arthroscopy may help relieve these problems.

Arthroscopy allows the diagnoses and treatment of knee disorders by providing a clear view of the inside of the knee with small incisions, utilizing a pencil-sized instrument called an arthroscope. The arthroscope contains optic fibers that transmit an image of your knee through a small camera to a television monitor.

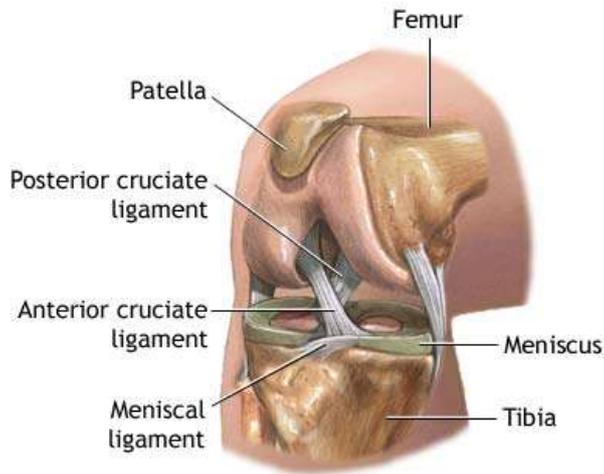
Modern or contemporary arthroscopy of the knee was first performed in the late 1960s. With improvements of arthroscopes and higher-resolution cameras, the procedure has become highly effective for both the accurate diagnosis and proper treatment of knee problems. Today, arthroscopy is one of the most common orthopaedic procedures in Australia.



### How the Normal Knee Works

The knee is the largest joint in the body, and one of the most easily injured. It is made up of the lower end of the thigh bone (*femur*), the upper end of the shin bone (*tibia*), and the knee cap (*patella*), which slides in a groove on the end of the femur. Four bands of tissue, the anterior and posterior cruciate ligaments, and the medial and lateral collateral ligaments connect the femur and the tibia and provide joint stability. Strong thigh muscles give the knee strength and mobility.

The surfaces where the femur, tibia and patella touch are covered with *articular cartilage*, a smooth substance that cushions the bones and enables them to glide freely. Semicircular rings of tough fibrous-cartilage tissue called the *lateral* and *medial menisci* act as shock absorbers and stabilizers.

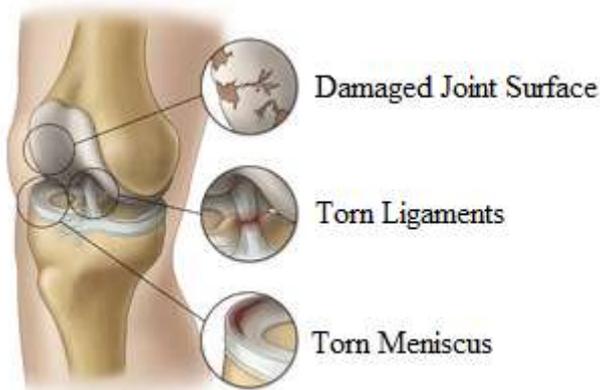


The bones of the knee are surrounded by a thin, smooth tissue capsule lined by a thin synovial membrane which releases a special fluid that lubricates the knee, reducing friction to nearly zero in a healthy knee.

## Knee Problems

Normally, all parts of the knee work together in harmony. But sports, work injuries, arthritis, or weakening of the tissues with age can cause wear and inflammation, resulting in pain and diminished knee function.

Arthroscopy can be used to diagnose and treat many of these problems:



- Torn meniscal cartilage.
- Loose fragments of bone or cartilage.
- Inflammation of the synovial membrane, such as rheumatoid or gouty arthritis.
- Abnormal alignment or instability of the kneecap.
- Torn ligaments including the anterior and posterior cruciate ligaments.

## Is Arthroscopy for You?

Signs that you may be a candidate for this procedure include swelling, persistent pain, catching, giving-way, and loss of confidence in your knee. When other treatments such as the regular use of medications, knee supports, and physical therapy have provided minimal or no improvement, you may benefit from arthroscopy.

Most arthroscopies are performed on patients between the ages of 20 and 60, but patients younger than 10 years and older than 80 years have benefited from the procedure.



## Preparing for Surgery

If you decide to have arthroscopy, you will be asked to complete a medical questionnaire. You may need to be seen in a pre-admission clinic where your fitness for the surgery will be assessed.

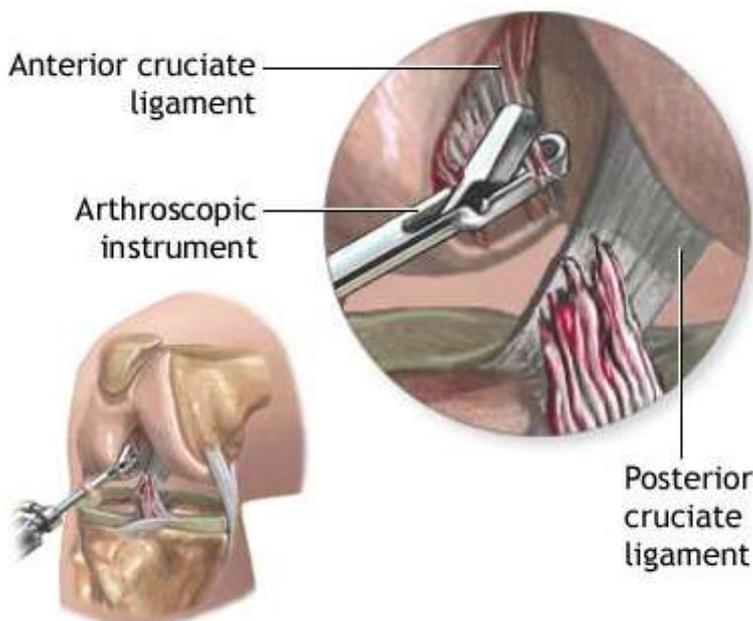
You will be informed which medications you should stop taking before surgery.

Tests, such as blood samples or a cardiogram, may be ordered prior to surgery if needed.

## Your Arthroscopic Knee Surgery

Almost all arthroscopic knee surgery is done on an outpatient basis. The hospital or surgery center will contact you about the specific details for your surgery, but usually you will be asked to arrive at the hospital an hour or two prior to your surgery. Do not eat or drink anything after midnight the night before your surgery if it is in the morning; or after 6am if your surgery is booked for the afternoon.

Arthroscopy can be performed under regional, or general anesthesia. Regional anesthesia numbs you below your waist, and general anesthesia puts you to sleep. The anesthetist will help you determine which is the most suitable for you.



A few small incisions will be made in your knee. A sterile solution will be used to fill the knee joint and rinse away any cloudy fluid, providing a clear view of your knee.

The arthroscope will then be introduced into the knee to properly diagnose your problem. If surgical treatment is needed, a variety of small surgical instruments (e.g., scissors, clamps, motorized shavers) are inserted through another small incision. This part of the procedure usually lasts 45 minutes to 1 1/2 hours.

Common treatments with knee arthroscopy include:

- Removal or repair of torn meniscal cartilage.
- Reconstruction of a torn cruciate ligament.
- Trimming of torn pieces of articular cartilage.
- Removal of loose fragments of bone or cartilage.
- Removal of inflamed synovial tissue.

At the conclusion of your surgery, your incisions will be closed with a suture or paper tape and covered with a bandage.

You will be moved to the recovery room. Usually, you will be ready to go home in one or two hours. You should have someone with you to drive you home.

## Your Recovery at Home

Recovery from knee arthroscopy is much faster than recovery from traditional open knee surgery. Still, it is important to follow the instructions carefully after you return home. You should ask someone to check on you that evening.

**Swelling** Keep your leg elevated as much as possible for the first few days after surgery.



**Wound Care** The wounds on the front of your knee will be closed with a suture beneath your skin. This suture will not require removal.

Your wounds will be dressed with waterproof dressings under the outer bandage. The outer bandage may be removed 24hrs after your surgery. The smaller dressing is to remain intact for 7-10 days.

You may shower, keeping the wounds dry. Once the outer larger dressing is removed, the smaller dressing will keep the wounds dry. Do not soak the wound; just let the water flow over it. Do not scrub the wounds. If water gets under the dressing, remove the wet dressing, pat dry (do not rub the wounds) and apply a new dressing.

Avoid soaking the wound in water until the wound has thoroughly sealed and dried.

Loosen any tight bandage at any time.

If the smaller waterproof dressings come off before seven days, a new dressing should be reapplied. This may have been given to you on discharge from the hospital, or can be bought from a chemist.

Once the wounds have healed **and** after 2 weeks, you should massage the scars with a cream (sorbolene or Vitamin E is best). This will help to break down the scar tissue around the wounds.

**Bearing Weight** After most arthroscopic surgeries, you can walk unassisted unless instructed otherwise. You can gradually put more weight on your leg as your discomfort subsides and you regain strength in your knee.

**Exercises to Strengthen Your Knee** You should exercise your knee regularly for several weeks following surgery to strengthen the muscles of your leg and knee. A physiotherapist may help you with your exercise program.

**Medications** You will be discharged from hospital with a prescription for pain medications which should be taken as required.

**Complications** Potential postoperative problems with knee arthroscopy include infection, blood clots, and an accumulation of blood in the knee. These occur infrequently and are minor and treatable.



## Warning Signs

Call the hospital or the rooms immediately if you experience any of the following:

- Fever.
- Chills.
- Persistent warmth or redness around the knee.
- Persistent or increased pain.
- Significant swelling in your knee.
- Increasing pain in your calf muscle.
- Shortness of breath or chest pain.

## Reasonable Expectations after Arthroscopic Surgery

Although arthroscopy can be used to treat many problems, you may continue to have some limitation in your activities even after recovery. The outcome of your surgery will often be determined by the degree of injury or damage found in your knee. For example, if you damage your knee from jogging and the smooth articular cushion of the weight-bearing portion of the knee has worn away completely, then full recovery may not be possible.

A return to intense physical activity should only be done after your post-operative review.

It is reasonable to expect that by six to eight weeks you should be able to engage in most of your former physical activities.

If your job involves heavy work, such as a construction laborer, you may require more time to return to your job than if you have a sedentary job. Please discuss this at your post operative review.