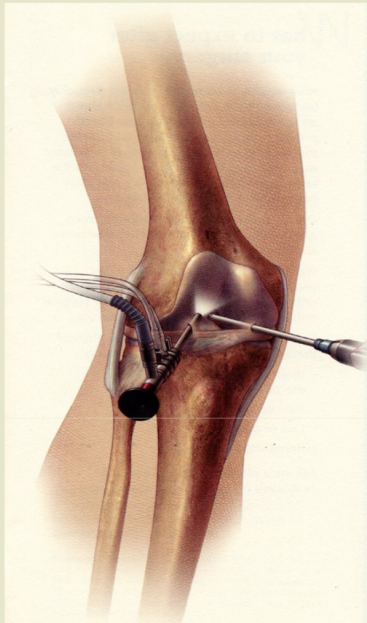


Knee Arthroscopy

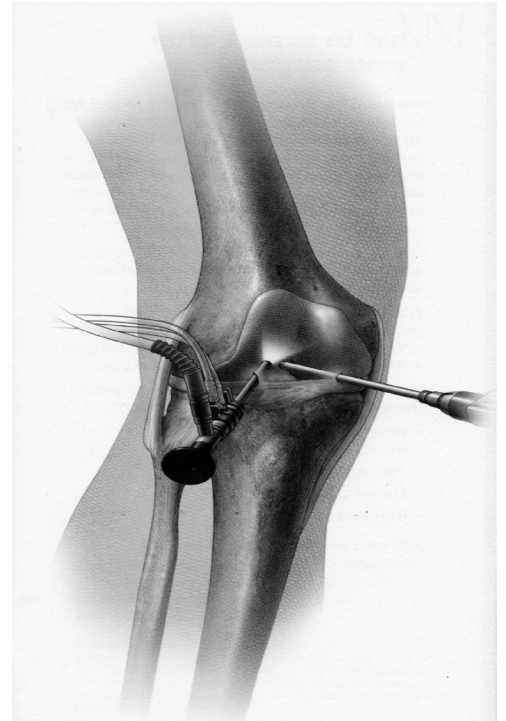


Patient guide to Knee Arthroscopy

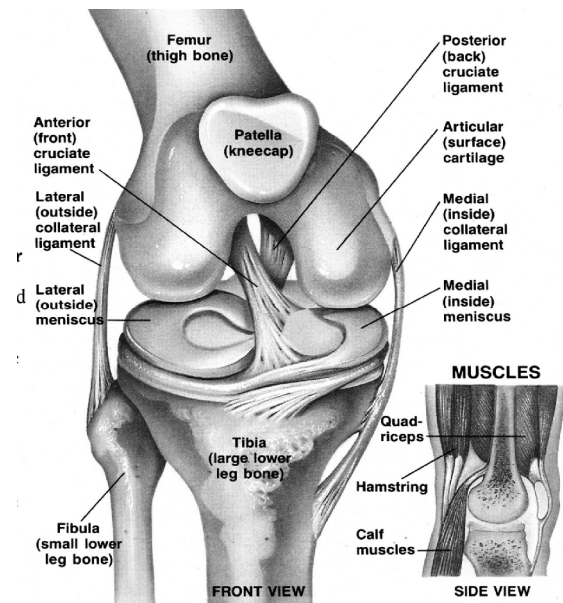
Robert A. Sciortino, M.D.
Bruce N. Jones, M.D.

What is arthroscopy?

Arthroscopy is a common surgical procedure for examining and repairing the inside of your knee. It is a minimally invasive surgical procedure which uses an Arthroscope and other specialized instruments. An Arthroscope is a small instrument which consists of a small lens which is about the size of a pencil and a miniature camera. Knee Arthroscopy is usually done as an outpatient procedure, and is done under a general anesthetic. Small incisions (about 1/4 inch) around the knee are made, and the Arthroscope and other small instruments are placed into the joint through these incisions. By using the Arthroscope your surgeon can diagnose and treat many common disorders of the knee joint.



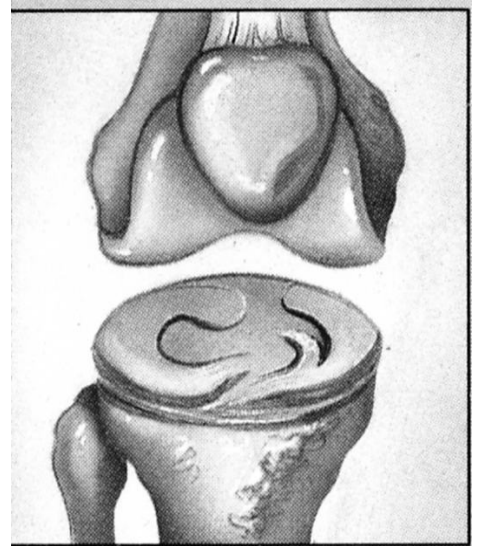
Normal knee anatomy



Reasons for Knee Arthroscopy

Meniscus / Cartilage Tears

The Meniscus is a C-shaped piece of cartilage. Each knee has two, a medial and a lateral meniscus. The meniscus acts like a “washer”, or “bushing” in between the bottom of the femur (thigh bone) and the tibia (leg bone). The meniscus can tear from a twisting injury, or from wear and tear from normal activity. Meniscus tears often do not heal by themselves. Arthroscopy can be used to remove the torn parts of the meniscus or occasionally the meniscus can be repaired.



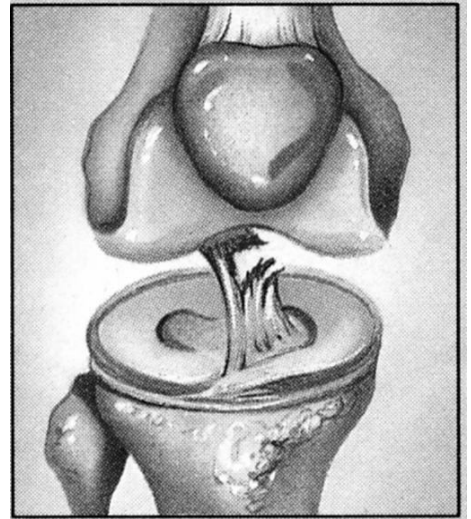
Loose Bodies, Loose Debris

Occasionally small pieces of cartilage or bone can tear completely loose and travel around the knee causing mechanical symptoms such as locking and catching. The Arthroscope can be used to locate and remove these loose pieces from the knee joint.

Reasons for Knee Arthroscopy

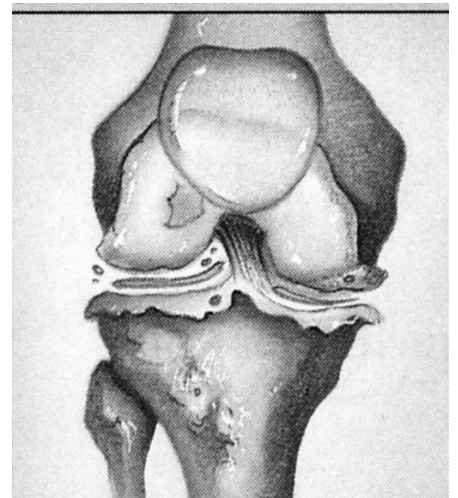
Ligament Tears

Ligaments are what connect one bone to another. Some injuries can cause ligament tears, and the most commonly injured ligaments are the Anterior Cruciate Ligament (ACL) and the Medial Collateral Ligament (MCL). A torn ligament can cause instability of the knee. The Arthroscope can be used to help with diagnosis, repairs and reconstruction of torn ligaments. The ACL is a ligament that commonly needs reconstruction to prevent instability and “giving-way” of the knee.



Articular Cartilage Defects

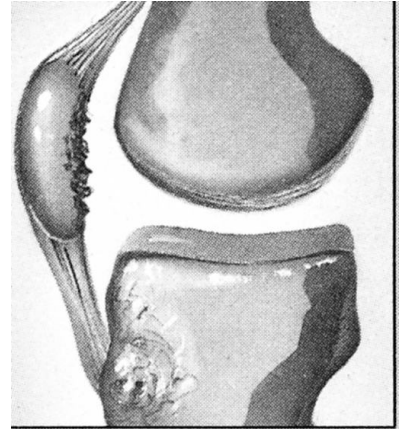
The articular cartilage is the cartilage that covers the ends of the bones where they meet. Occasionally surface defects or rough areas will develop on the articular cartilage of the knee. These can be caused by injuries or wear and tear. The Arthroscope can be used to smooth out these defects, or to remove damaged cartilage.



Reasons for Knee Arthroscopy

Patella disorders

The patella (kneecap) can also have damaged cartilage or can become mal-aligned. The Arthroscope can be used to smooth out the patellar cartilage or to evaluate the alignment of the patella. Some patients who have poor alignment of the patella will require a Lateral Release. A Lateral release is a procedure that is performed using the Arthroscope to improve the alignment of the kneecap.



What to expect the day of surgery

- Plan on arriving at the hospital 2 hours prior to the start time of your procedure.
- Arrange for someone to be able to pick you up after surgery, as you will be unable to drive.
- Do not eat or drink anything after midnight on the night before surgery.
- Your surgeon will sometimes recommend that the anesthesiologist perform a nerve block prior to your surgery. This will greatly reduce your discomfort post-operatively.
- After surgery you will be in the recovery room for approximately 1 hour.
- After the recovery room, you will stay in the observation room for an additional 1—3 hours.
- Your leg will be in a bulky soft dressing.
- You may be given ice packs or a cold therapy unit.
- You will be given a prescription for a pain medication.
- You will need crutches or a walker.

What to expect after you get home

- Try to get a lot of rest for the first few days after surgery.
- Resume all pre-operative medications
- Take prescribed pain medications as needed. Try to take the medication before the pain becomes too severe
- You may take over the counter pain medications such as Advil, Aleve, or Tylenol as needed for less severe pain.
- Your Knee will be very swollen for the first few days after surgery. This is due to the fluid that we use during surgery and is normal.
- Use icepacks or your cold therapy unit as much as possible for the first few days to control pain and swelling.
- Remove your dressing after 2 or 3 days and cover the small incisions with band-aids. Cover larger incisions with larger bandages.
- Expect some drainage from the incisions for the first few days. You may leave the incisions open to air if there is no drainage for two days in a row.
- You may shower, but do not soak the incisions, and do not leave a wet bandage on the incisions.
- Call for a follow-up appointment 10–14 days after surgery.
- Use crutches or a walker for 3 to 7 days after surgery, unless you are told to remain on crutches. You may bear as much weight as is comfortable, and you may discontinue the crutches whenever you are comfortable walking without them.
- Occasionally some patients will be told to remain on crutches and not bear any weight until seen in the office.

Post-operative Rehabilitation Protocol

Your surgeon will prescribe a rehabilitation protocol for you depending on the type of procedure performed. You will usually begin your rehabilitation program after your first post-operative visit. Often your surgeon may give you a referral to a physical therapist at this time to supervise your rehab.

Your recovery time will vary depending on the type of procedure performed. Generally light activity can be resumed within a few weeks, but it may be several months before you can return to heavy work or sports.

The following pages contain exercises for range of motion and strengthening that your physician may recommend. Unless otherwise directed, you may begin these exercises immediately after surgery, or as soon as you are comfortable. Most patients can begin weight bearing immediately after surgery, but occasionally we will tell you to remain on crutches and remain non weight bearing. You will be told if you should not bear weight.

Knee range of motion and strengthening

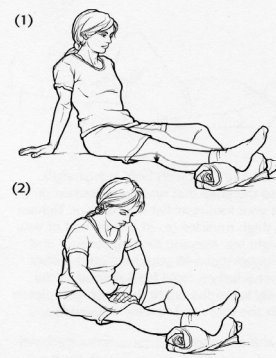
The following pages contain some exercises for your knee. These exercises are to improve your knee's motion and strength. Your surgeon and/or your therapist will direct you as to which exercises you should do. Your therapist may also have other exercises in addition to these. Before beginning each exercise it is often useful to loosen up the knee by use of a moist-heating pad, taking a hot shower or soaking in a hot tub if possible.

The first exercises are to regain your range of motion and will help regain your knee's flexibility. You may begin these exercises immediately after surgery. These first exercises are particularly important for people who have had more extensive surgery such as ACL reconstruction, and Lateral release.

1. Knee Extension

Place a rolled up towel under the heel of your leg. Allow the leg to fully straighten on its own, then gently push down on your thigh just above the knee and try to straighten your leg even more. Hold for 10 to 15 seconds. Repeat 5 to 10 times

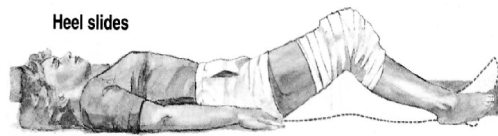
Knee extension



2. Heel Slides

Lie flat on your back or sit up on a flat surface and gradually slide your heel up towards your hip as far as you can. Try to reach your leg with your hands and pull your heel further if you can. Hold for 10 to 15 seconds. Repeat 5 to 10 times.

Heel slides



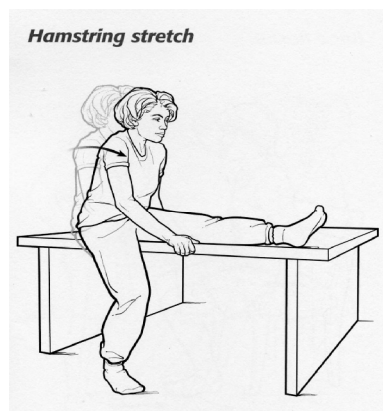
3. Prone Leg Hangs

For this exercise lie on your stomach on a bed or table with your feet hanging over the end. Slide down the bed until your knees are to the end of the bed. Allow gravity to fully straighten your leg. Hold this position for 15 to 20 minutes. This is a very good exercise for ACL reconstruction patients

4. Hamstring Stretch

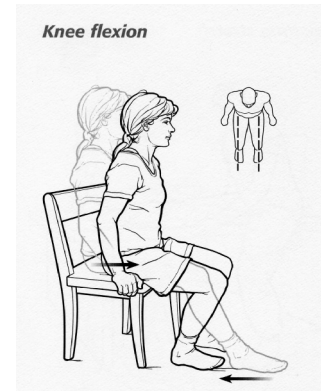
Sit on the edge of a bed or table with your leg straight in front of you. Let the other leg rest on the floor for support. Lean forward until you feel a stretch in the back of your leg. Do not bounce. Hold the stretch for 10 to 15 seconds. Repeat 5 to 10 times.

Hamstring stretch



5. Knee Flexion

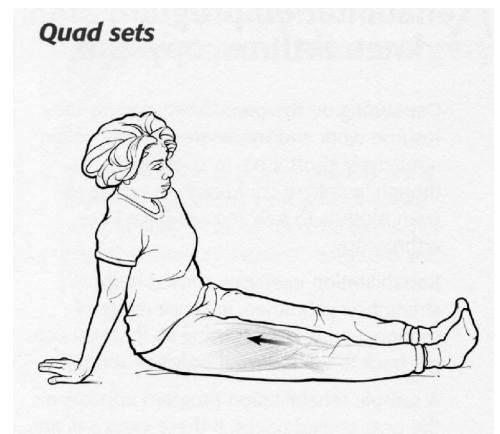
Sit on a chair with your foot on the floor. Slide your foot back as far as possible. Then, keeping your foot in place, slide your hips forward over your foot. Keep your foot straight in line with your thigh. Hold each stretch for 10 to 15 seconds. Repeat 5 to 10 times.



These next exercises are to regain your knee's strength. You may begin the quad sets, the straight leg raises, and the short arc quad sets immediately after surgery, but for the rest of the exercises, you will need to have regained much of your flexibility.

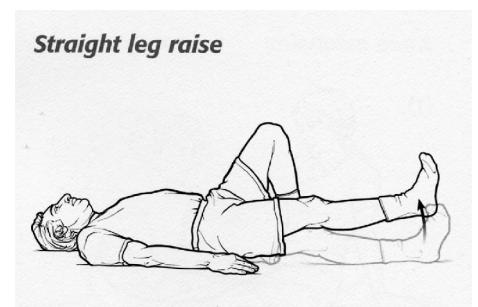
1. Quad Sets

With your leg as straight as possible, tighten your front thigh muscles as tight as possible and hold for 10 seconds. Then completely relax the thigh for 3 seconds. Repeat 15 to 20 times.



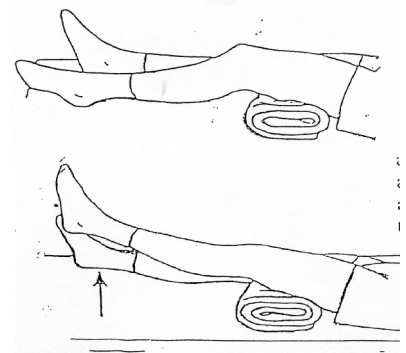
2. Straight Leg Raise

Lie on your back with your leg straight. Bend the opposite knee so that your foot rests flat on the floor. With your knee straight, tighten your quads and lift your heel off of the floor about 6 inches. Hold for a count of 6 seconds, then lower to the floor and rest for four seconds. Repeat 15 to 20 times. If you can do this exercise easily, you can add ankle weights 1 lb. at a time.



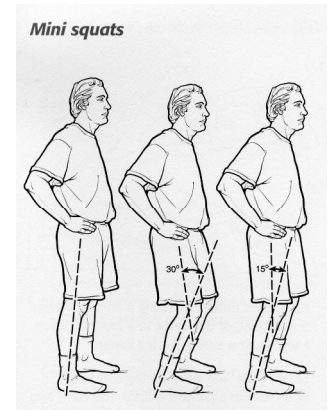
3. Short Arc Quad Sets

Sit or lie on your back with a rolled towel or blanket under your thigh so that your knee is bent 30 to 40 degrees. Lift your foot and straighten your knee. Hold for a count of 6 seconds then lower to floor for 4 seconds repeat 15 to 20 times. You can add ankle weights to this exercise if you can do 20 repetitions easily.



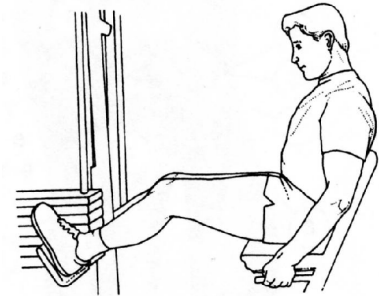
4. Mini Squats

Stand with your feet shoulder width apart, toes slightly turned outward. Bend knees to about 30 degrees, bending slightly forward at the waist and keeping your back straight. Hold for 3 seconds and then slowly straighten them. Repeat 15 to 20 times.



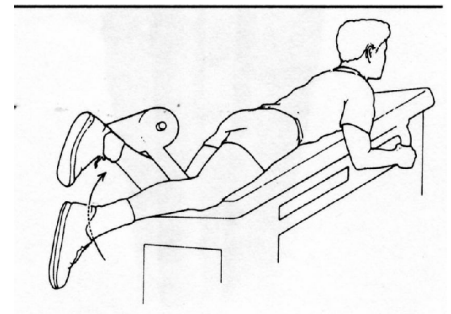
5. Leg Press

For this exercise you will need access to a leg press machine. Start with the knee bent 30 to 40 degrees. Press the weight by extending your legs until they are almost straight, hold for 2 to 3 seconds then slowly lower the weight. Repeat 15 to 20 times. Start with light weights and gradually work up.



6. Leg Curl

For this exercise you will also need access to a leg curl machine. Lie face down on the bench and flex your knee as high as possible using only the involved leg. Hold for 2 to 3 seconds and then slowly let it down. Repeat 15 to 20 times. Start with light weights and slowly work up.



7. Stationary Bike

You may begin using a stationary bike as soon as you are comfortable. Make sure the seat is high enough. To ensure the seat is at the right height, sit on the seat and put your heel on the pedal. If the seat is at the right height, your knee should be straight. Begin with little or no resistance and gradually increase resistance.

8. Return to Sports

Your return to sports should be gradual and will vary depending on what type of surgery was performed. Generally exercise machines such as elliptical machines, cross trainers, and stair masters can be started first, followed by treadmills, followed by walking or running on a flat even surface like a track. Next you can begin cross country running, or sports which require cutting and twisting.