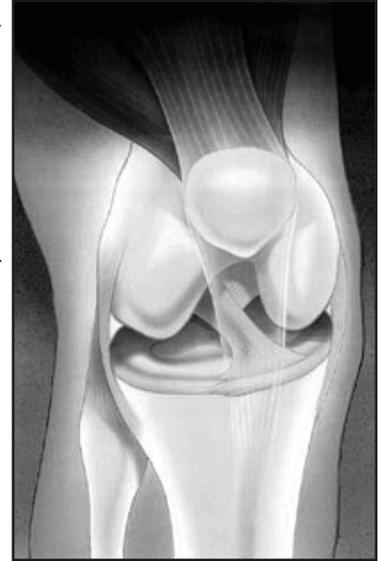


Knee Arthroscopy

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

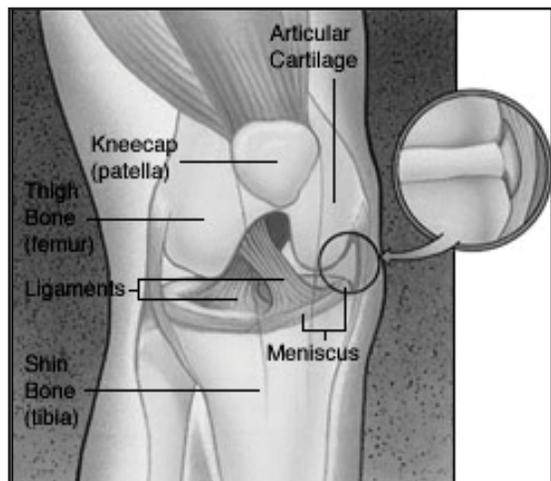
Arthroscopy allows an orthopaedic surgeon to diagnose and treat knee disorders by providing a clear view of the inside of the knee with small incisions, utilizing a pencil-sized instrument called an arthroscope. The scope contains optic fibers that transmit an image of your knee through a small camera to a television monitor. The TV image allows Dr. Norberg to thoroughly examine the interior of your knee and determine the source of your problem. During the procedure, the surgeon also can insert surgical instruments through other small incisions in your knee to remove or repair damaged tissues.

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 the United States.



How the Normal Knee Works

The knee is the largest joint in the body, and one of the most commonly 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.
- Damaged joint surfaces or softening of the articular cartilage known as chondromalacia.
- 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.

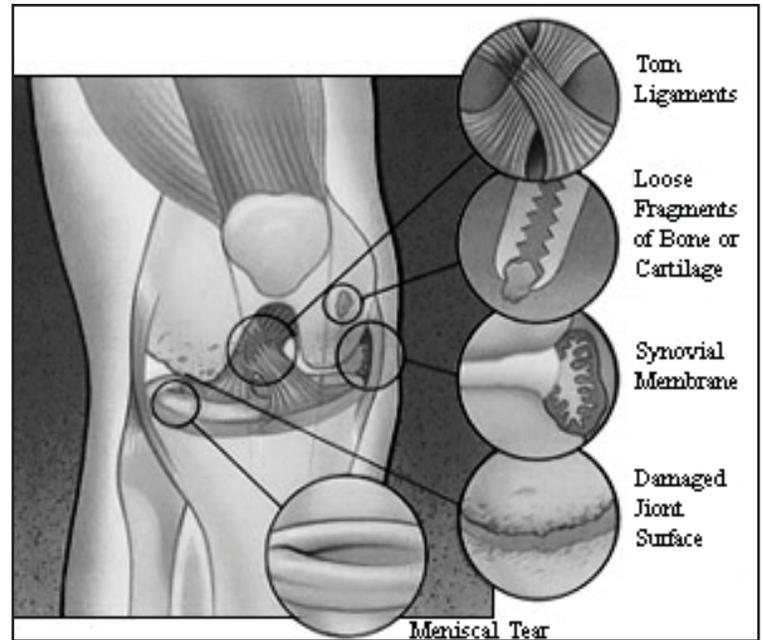
By providing a clear picture of the knee, arthroscopy can also help Dr. Norberg decide whether other types of reconstructive surgery would be beneficial.

Is Arthroscopy for You?

Your family physician may refer you to Dr. Norberg for an evaluation to determine whether you could benefit from arthroscopy.

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 16 and 60, but patients younger than 10 years and older than 80 years have benefited from the procedure.



The Orthopaedic Knee Evaluation

The orthopaedic knee evaluation consists of three components:

- A medical history, in which Dr. Norberg gathers information about your general health and asks you about your symptoms.
- A physical examination to assess your knee motion and stability, muscle strength and overall leg alignment.
- X-rays to evaluate the bones of your knee. Dr. Norberg may also arrange for you to have an MRI to provide more information about the soft tissues of your knee. An MRI uses magnetic waves to create images. They are not X-rays. Blood tests may be obtained to determine if you have arthritis.

Dr. Norberg will review the results of your evaluation with you and discuss whether arthroscopy would be the best method to further diagnose and treat your knee problem. Other treatment options, such as medications or other surgical procedures also will be discussed and considered.

Dr. Norberg will explain the potential risks and complications of knee arthroscopy, including those related to the surgery itself and those that can occur after your surgery.

Preparing for Surgery

If you decide to have arthroscopy, you may be asked to have a complete physical with your family physician before surgery to assess your health and to rule out any conditions that could interfere with your surgery.

Before surgery, tell Dr. Norberg and his team about any medications that you are taking. You will be informed which medications you should stop taking before surgery.

Tests, such as blood tests or a cardiogram (EKG), may be ordered by your family doctor as part of the pre-operative evaluation.

Your Arthroscopic Knee Surgery

Almost all arthroscopic knee surgery is done on an outpatient basis. Your 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 and a half or two prior to your surgery. Do not eat or drink anything after midnight the night before your surgery.

After arrival, you will be evaluated by a member of the anesthesia team. Arthroscopy can be performed under regional, or general anesthesia. Regional anesthesia numbs you below your waist, and general anesthesia puts you to sleep. The anesthesiologist will help you determine which would be the best for you.

Dr. Norberg will make a few small incisions 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.

Dr. Norberg will then insert the arthroscope to properly diagnose your problem, using the TV image to guide the arthroscope. If surgical treatment is needed, the surgeon can use a variety of small surgical instruments (e.g., scissors, clamps, motorized shavers, or lasers) 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, Dr. Norberg will typically close your incisions with paper tape and cover them 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 will require 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 your 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. Apply ice at a minimum of 20 minutes every couple of hours to relieve swelling and pain.

Dressing Care

You will leave the hospital with a dressing covering your knee. You may remove the dressing the 2nd day after surgery. You may shower and get your incision wet starting the 3rd day after surgery. Do not soak or submerge your incision for 2 weeks. Keep your incisions clean and dry. The steri-strips (paper taper) used to close the incisions should be left in place until they fall off. This is usually 10 to 14 days.

Dr. Norberg will see you in the office a 6-12 days after surgery to check your progress, review the surgical findings, and begin your postoperative treatment program.