

PATIENT GUIDE TO MENISCUS INJURIES

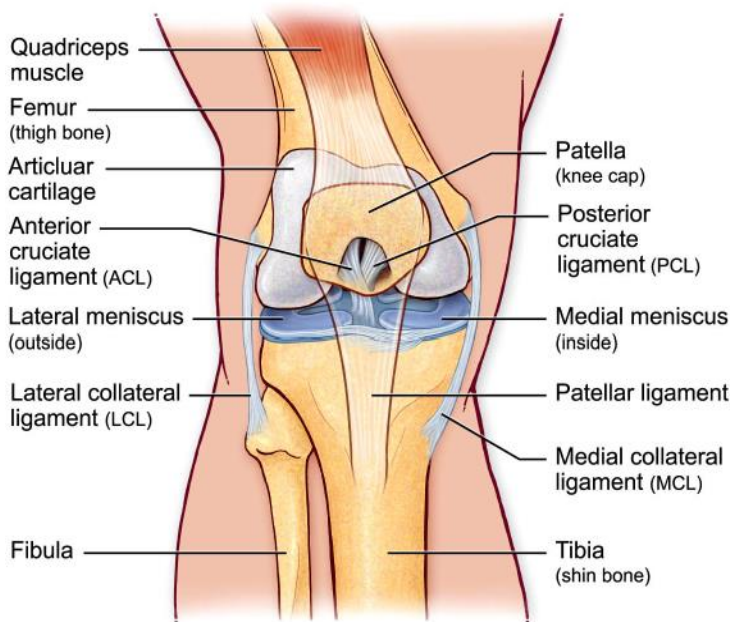


FIGURE 1

What is the meniscus?

The meniscus (**Figures 1&2**) are cartilage rings found on both the inside and outside of the knee. They sit between the femur (thigh bone) and tibia (shin bone), and act as shock absorbers in the knee. In addition, they provide some stability to the joint.

How is the meniscus torn?

The meniscus is usually torn (**Figure 2**) by a twisting injury to the knee. The meniscus can also be injured by squatting down or forcefully bending the knee. Occasionally, the tear occurs with very little stress on the knee, because the tissue has worn out over time.

How do I know my meniscus is torn?

Most tears of the meniscus lead to knee pain in the area of the tear, on the inside or outside of the knee. Swelling of the

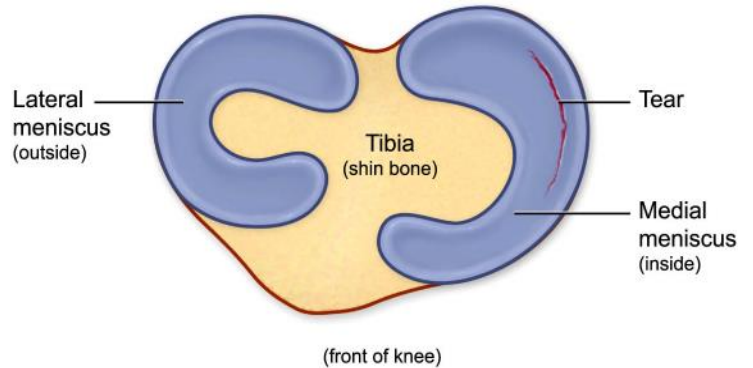


FIGURE 2

knee may also occur. Occasionally, locking of the knee can occur, when the meniscus gets wedged inside the knee. Pain and instability caused by the meniscus tear can also cause the knee to buckle or “give way”. Twisting activities usually worsen the symptoms.

Do I need x-rays?

A set of x-rays may be ordered to evaluate the knee for arthritis or a fracture of the bones. Even if a MRI was already performed, the x-rays are usually necessary for a complete evaluation.

Do I need a MRI?

Many times the diagnosis of a meniscus tear can be made through the exam in the office. However, a MRI can be helpful to confirm the tear and rule out any other injuries to the knee.

Is there usually any other damage to the knee when the meniscus is torn?

Ligaments (**Figure 3**) in the knee can be damaged at the same time as the meniscus, depending on how your knee was injured. The most common ligament to be torn is the ACL (See **Patient Guide to ACL Injuries**). In addition, there can be an injury to the joint surface (articular cartilage) at the time of the injury. If surgery is required, damage to the joint surface will be evaluated and treated at that time.

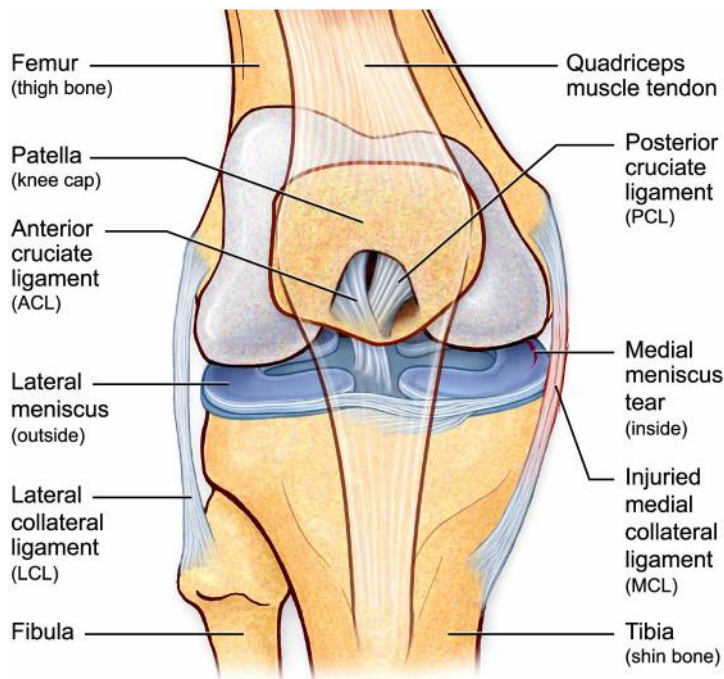


FIGURE 3

What treatment options do I have?

Some people with meniscus tears will respond to non surgical treatment, including rest, medications, and physical therapy. Most meniscus tears do not heal, but the symptoms from the tear can quiet down or resolve. In some cases, a cortisone injection can also be helpful to resolve the pain and swelling. Whether or not you are a good candidate for conservative treatment will depend on the type of tear, age of the tear, and your activity level.

If your symptoms do not resolve, then you may require surgical treatment.

How is the surgery for the meniscus performed?

Meniscal surgery is performed by arthroscopy (**Figure 4**). The arthroscope is a small fiber optic instrument that is placed into the knee joint through a small incision. The camera is then viewed on a TV monitor, and pictures can be taken. The arthroscope allows a complete evaluation of knee joint, including the kneecap (patella), the cartilage surfaces, the meniscus, the ligaments (ACL & PCL), and the joint lining. Small instruments ranging from 3-5 millimeters in size are inserted through an additional incision and injury can be diagnosed, and damaged tissue can be repaired or removed.

Before the development of arthroscopy, large incisions had to be made over the knee joint to treat or diagnose injuries. Today's arthroscopic techniques allow more complete evaluations of the knee joint while accelerating the rehabilitation process.

What is the difference between partial meniscectomy and meniscal repair?

Depending on the type of tear, the piece of meniscus that is torn may be removed from the knee (partial meniscectomy) or repaired (sewn back in place) (**Figure 5**). Whether or not a tear

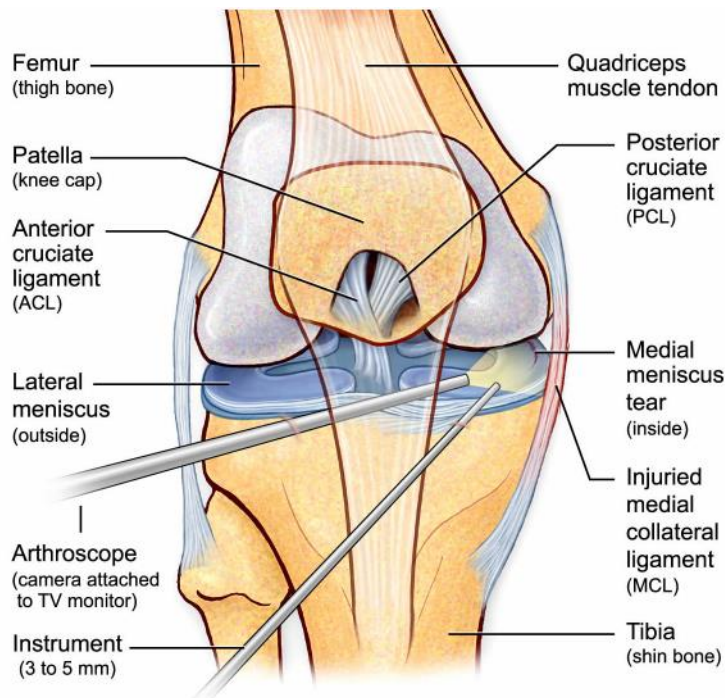


FIGURE 4

is repaired depends on the likelihood of the tear healing. If a tear occurs in the outer one-third of the meniscus (peripheral tear), there is usually adequate blood supply for the tear to heal and it is fixed. However, tears in the inner two-thirds of the meniscus (where most tears occur) have no blood supply, and will not heal with repair. Therefore, the torn piece needs to be removed. Every effort is made to try and repair a tear that may heal.

If the tear is repaired, it may require a small incision on the inside or outside of the knee to tie down the stitches and protect the nerves and arteries for the repair. Many times the meniscus can be repaired all arthroscopically without any additional incisions.

Don't I need my meniscus?

It is always best to have your own normal meniscus. For this reason, every attempt is made to repair a meniscus tear that may heal. However, for tears that are torn beyond repair, it is best to remove the torn piece. The piece that is torn does not function like a normal meniscus, so removing that

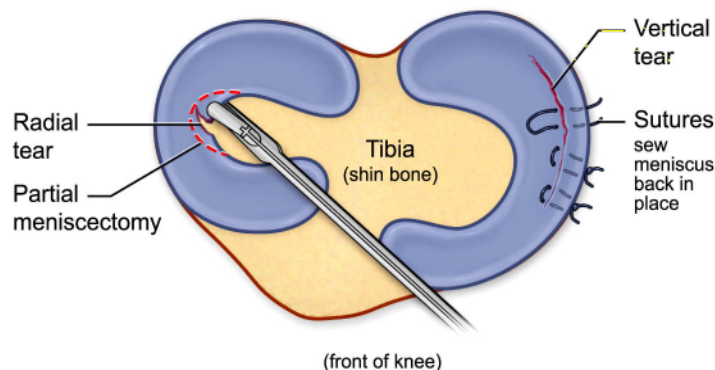


FIGURE 5

piece does not decrease the amount of functioning meniscus. Leaving a torn piece may irritate the knee joint and cause further damage. Only the portion of the meniscus that is torn or diseased is removed.

What is a meniscal “root” tear?

In certain cases, the meniscus is torn directly at its attachment to the bone, the meniscus “root”. These can be especially bad tears because they disrupt the function of the meniscus. In many cases, these need to be treated aggressively with surgery to prevent the development of rapid arthritis in the knee. If they need to be fixed, the knee typically needs to be protected on crutches for six weeks following surgery. In some cases, these tears are not fixable and need to be trimmed out, especially in cases where there is already significant arthritis in the knee.

Will I be “bone on bone” if a piece of meniscus is removed?

In most cases, only a small piece of meniscus is removed and the remainder of the meniscus continues to act a shock absorber. Only in rare cases is a large portion of the meniscus removed. Again, only the damaged tissue is removed at the time of the surgery.

What are some of the possible complications of surgery?

Possible complications of arthroscopy include stiffness of the knee after surgery or continued pain. The use of arthroscopic techniques attempts to limit these complications. Other complications include an infection, bleeding, nerve damage, blood clots, or problems with the anesthesia.

If a meniscus repair is performed, it is possible that the torn area will not heal. This would require a second surgery to remove the torn meniscus. Even though this is possible, it is better to attempt to repair a meniscus that may heal, in order to preserve the normal meniscus function.

What kind of anesthesia is used?

Knee arthroscopy is usually performed with general anesthesia (going to sleep). It is typically a quick surgery with a rapid recovery. Local anesthesia to help numb the knee is also used.

What do I need to do to prepare for surgery?

Our staff will help to set up the surgery through your insurance company and will instruct you on any paperwork that may be necessary.

Prior to your surgery, you may be asked to get several medical tests, done on an outpatient basis. Most patients need some minor blood tests and a urinalysis. If you are over age 50, you may require an EKG and chest x-ray. Some patients need to see an internist or their family doctor to obtain clearance for surgery.

The night before the surgery, a member of our staff will contact you about what time to arrive for surgery. You may not eat or drink anything after midnight the night before your surgery.

Can I continue to take my medications?

You should STOP taking any aspirin or anti-inflammatory medication (Motrin, Advil, Relafen, Naprosyn, etc.) at least seven days prior to your surgery. However, you may CONTINUE to take Celebrex or Bextra if you are on these medications. You may also take Tylenol as needed.

Continue to take any other prescribed medications, such as blood pressure pills, up until the day of surgery. You may also take these medications the morning of surgery with a sip of water.

How long will I be in the hospital?

Almost all patients are able to have surgery and go home the same day.

What happens the day of surgery?

The day before surgery you will be told what time to report to the hospital. You will be admitted and taken to a pre-operative holding area where you are prepared for surgery.

You will be asked several times which knee is being operated on, and the surgical site will be initialed. Please note that you are asked this question many times on purpose.

After the operation, you will be taken to the recovery room to be monitored. Once the effects of anesthesia have worn off and your pain is under good control, you will be taken to another area where you can see your family and finish recovering. You will be given all of your post-operative instructions and pain medication before leaving.

Please be aware that the process of getting checked in, prepared for surgery, undergoing the operation, and recovering from anesthesia takes the majority of the day. I would recommend that you and your family members bring along some reading material to make the process easier for all.

How should I care for my knee after surgery?

Prior to your discharge, you will be given specific instructions on how to care for your knee. In general, you can expect the following:

Diet:

Resume your regular diet as soon as tolerated. It is best to start with clear liquids before advancing to solid food.

Medication:

You will be given a prescription for pain medication.

Bandage:

You will have a thick dressing on the knee. You will be instructed on when it can be removed, usually in 3 days. After your dressing is removed, you should cover your sutures with a Band-Aid to protect the area from irritation.

Showering:

You may shower after your dressing is removed, after 2 – 3 days. You cannot take a bath until the wounds are completely

sealed, usually 2 – 3 weeks after surgery.

Crutches:

You will have crutches after surgery, and will be instructed on how to use them. How long you use crutches will depend on the type of surgery performed. Crutches are commonly only required for a few days to one week.

Brace:

If a meniscus repair is performed, you may receive a brace to restrict the motion of your knee up to 90 degrees. This is to protect the repair for the first six weeks, to allow the area to heal.

Ice:

You may receive an ice machine that continually surrounds your knee with cold water. If not, you may apply ice over the dressings for 30 minutes every hour for several days. Do not use heat.

Suture removal:

Your stitches will be removed at your office visit 7-10 days after surgery. Occasionally, sutures are used which resorb and do not need to be removed.

Follow-up office visit:

You will be instructed on when to follow-up in the office. This is usually 7-10 days after surgery.

Exercise:

You will be instructed on exercises you can do immediately after surgery. You will start physical therapy within 1 to 2 weeks after surgery.

Return to work or school:

You can return to school or work within 3 – 5 days using the crutches. If your job involves more extended walking or heavy activity, you may be out of work or school for a longer period of time.

What will rehabilitation involve?

The rehabilitation is based on several goals: 1) allowing the tissue to heal; 2) regaining motion; 3) regaining strength; and 4) return to sports. After partial meniscectomy, the rehabilitation generally occurs very rapidly. Most patients can return to strenuous work in two to six weeks. Following meniscus repair, you will be restricted from bending beyond 90 degrees or squatting for the first 4 - 6 weeks. The specific rehabilitation protocol will be reviewed after surgery.

When can I return to sports?

Your return to sports will depend on the extent of damage and the procedure performed on your knee. In general, you will be allowed to return to sports in one to two months after surgery. If a meniscus repair is performed, sports may be limited for the first three to four months. You must have good motion, strength, and control of your knee. How quickly you

return to sports depends on several factors, including: 1) your own rate of healing; 2) the damage found at surgery; 3) if you have any complications; 4) how well you follow the post-operative instructions; 5) how hard you work in rehabilitation.

Questions?

If you have any questions about your injury or the possible need for surgery, please don't hesitate to contact me or my staff.

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