Understanding Meniscus Tears

The meniscus is a C-shaped pad of rubbery cartilage inside the knee joint. It’s often compared to a shock absorber because it helps cushion and stabilize the knee during movement. Although the meniscus is tough, it may tear when placed under too much stress. Fortunately, meniscus tears can be treated with surgery and rehabilitation. This means you can usually return to sports and other activities.

When the Meniscus Is Healthy

A healthy meniscus protects the knee by absorbing shock and spreading weight across the joint. It also works along with other knee cartilage to help the leg bones fit together properly. Much of the meniscus does not have good blood supply. But blood vessels along the outer edge of the meniscus can help this area heal from injuries.

When the Meniscus Is Torn

A tear creates uneven surfaces in the meniscus. This irritates the knee joint and often causes pain, swelling, and stiffness. It can also cause a catching or “locking” sensation in the knee. Most people can still walk after their meniscus is torn. But it’s important to see a doctor for treatment. A tear often requires surgery since it may not heal on its own. If not treated, a tear can also lead to more serious knee problems.

There are two menisci in each knee. The medial meniscus is on the inside of your knee, next to your other leg. The lateral meniscus is located on the outside of your knee.
Common Types of Meniscus Tears

Some types of meniscus tears result from injuries—such as twisting the knee while the foot is planted. Others are caused by wear and tear from activities such as squatting. Tears may also occur as aging weakens and thins the meniscus. The location and shape of the tear often determine the type of surgery used to treat it. You can also have more than one type of tear at a time.

A “bucket handle tear” leaves a loose edge of tissue shaped like a bucket handle.

A “radial tear” starts in the inner edge of the meniscus.

A “parrot beak” or “flap tear” creates a flap of meniscus.

A “horizontal cleavage tear” splits the central part of the meniscus.

Your Surgical Evaluation

To learn more about your injury, you’ll be evaluated by an orthopaedic surgeon (bone and joint specialist). The evaluation includes questions about your health and a physical exam. You may also have imaging tests. After the evaluation, your doctor will talk with you about treatment options. Together, you can decide on the best way to treat your knee.

Medical History

Your doctor will ask about your symptoms and any history of knee problems. You’ll also discuss the location of any pain and when your symptoms started. This helps determine if your symptoms are caused by a tear and not some other problem.

Physical Exam

A physical exam helps your doctor look for signs of a meniscus tear. These include a limited range of motion, swelling, and tenderness. Signs of a tear can also include popping or clicking sounds when the doctor bends your knee.

Imaging Tests

Imaging tests let your doctor view a tear, check for related injuries, and rule out other problems.

- X-rays can show bone fractures or arthritis.
- MRI (magnetic resonance imaging) is used to view soft tissues, such as the meniscus.
Your Surgery

To treat your torn meniscus, your surgeon may suggest arthroscopy. This is surgery that uses a thin scope and camera to view the inside of the knee. Arthroscopy requires only small incisions, which helps limit pain and speed healing. You can usually go home the same day as your surgery.

Before Surgery

Follow your surgeon’s instructions to prepare for surgery. After you arrive at the hospital, you’ll be given an IV to provide fluids and medication. An anesthesiologist will explain the type of anesthesia that will be used to prevent pain during your surgery. You will receive one or more of the following:

- Local anesthesia to numb just the surgical area
- Regional anesthesia to numb specific areas of your body
- General anesthesia to let you sleep during the procedure

Looking Inside Your Knee

To view the meniscus, your surgeon will make small incisions (portals) in your knee. An arthroscope is then guided through one of the portals. The scope is a long, thin device that contains a tiny light and camera. The camera sends images from inside the knee to a video monitor. Sterile fluid is passed into the knee to expand the joint. This makes it easier for your surgeon to work. To treat the meniscus, surgical instruments are guided through the other portals into the knee joint.
Two Options for Treatment

Depending on your tear, the meniscus can be treated in one of two ways. In most cases, the damaged part of the meniscus is removed. But your surgeon may try to repair the tear if it is located in the outer edge of the meniscus. This is because the outer edge has a good blood supply and heals more easily. Talk with your surgeon if you have questions about these options.

Removing the Meniscus

To prevent rough edges from irritating the knee joint, your surgeon may remove the damaged part of the meniscus. The meniscus won’t grow back, so as little tissue as possible is removed. The remaining meniscus works along with other cartilage in the knee to cushion your joint.

Repairing the Meniscus

To repair the meniscus, torn edges are held in place with sutures or special fasteners. To do this, another portal at the back or side of your knee may be needed. It will take time for the repaired edges to fully heal. This means a longer recovery than if a portion of the meniscus is removed.

After Surgery

After surgery, you’ll rest for a time in a recovery area. Stitches, staples, or special strips of tape are used to close the portal incisions. Your knee will also be bandaged and wrapped. You can usually go home within a few hours. You’ll need to use crutches, and may also have a brace for support. Ask your surgeon how much weight you can put on your injured leg.

Risks and Complications

Meniscus surgery is a safe procedure. But it does have some risks. These include:

- Infection
- Risk that the meniscus will tear again after surgery
- Blood clots
- Blood vessel or nerve injury (very rare)
Recovery and Rehabilitation

Help make your surgery a success by taking an active role in your recovery. At first, this means learning how to care for your knee while it heals. Later, you may begin rehabilitation (rehab) exercises. These help improve flexibility and build strength. Rehab exercises can also help reduce pain and prevent other knee problems in the future.

Recovering at Home

Start your recovery by reducing pain and swelling. This is done using rest, icing, and elevation. For best results, rest with your leg above heart level. Put ice on your knee 3 to 5 times a day for 20 minutes at a time. Take any medications, such as pain medications, that are prescribed. Follow your surgeon’s advice about how to get around while you heal.

Follow-up Appointments

Be sure to keep follow-up appointments during your recovery. These allow your surgeon to check your progress and make sure you’re healing well. During office visits, your surgeon can also help you set goals for rehab. When done properly, rehab can help speed your healing and let you return to activities more quickly.

When to Call Your Doctor

Call your doctor if you notice any of the following after surgery:

- Fever or chills
- Sharp or increasing pain
- Ongoing drainage at the incision
- Redness or swelling of the incision
- Swelling and tenderness in the calf

Icing your knee will help you feel better. Keep a cloth between the ice and your knee to prevent skin damage.
Rehabilitation

Soon after surgery, you may begin a program of exercises at home or in a physical therapy clinic. The goal is to restore as much normal function in your knee as possible. The intensity of your program depends on the tear, the type of surgery, and how active you hope to be in the future. Exercise your knee as often as prescribed. But stop any activity that causes sharp or increasing pain.

Improving Flexibility

You may be given exercises to improve your knee’s range of motion. These help prevent your knee from getting stiff. Do slow, smooth stretches without bouncing. You should feel a pull in your muscles, but not pain.

Building Strength

You may be given exercises to build strength in your leg muscles. This will help make your knee more stable during activities. Strength exercises also lower your chance of reinjury, and help improve your balance and coordination.

Rehabilitation exercises can help restore proper knee function.

Learning to Get Around

Crutches can help you get around during your recovery. They also reduce stress on your knee, helping it to heal. Follow your surgeon’s advice about how much weight to put on your injured leg.

- Start in a balanced stance with the crutches about a foot in front of you.
- Hold the crutches against your sides. Don’t press them into your armpits.
- Step forward with your injured leg. Land lightly between the crutches.
- Support your weight on your hands. Lift your good (uninjured) leg and step forward through the crutches.
- Land with your good leg about a foot in front of the crutches.
- Reach forward with the crutches to take the next step.
Your Surgical Checklist

A checklist such as the one below can help remind you what to do before and after your surgery. Ask your surgeon to go over the information with you. Also, be sure to follow any special instructions you are given.

Before Surgery

- Tell your surgeon about all medications, supplements, or herbal remedies you take. Ask if you should stop taking any of them before surgery.
- Stop taking aspirin, ibuprofen, and other medications as directed before surgery.
- Ask your surgeon about getting crutches to use during recovery.
- Arrange for an adult family member or friend to give you a ride to and from surgery.

After Surgery

- Rest with your leg slightly elevated. Use ice to reduce swelling.
- Take care of your incisions as directed. Ask your surgeon when it’s okay to start bathing again.
- See your surgeon for a follow-up visit after surgery.
- Do rehabilitation exercises as prescribed.
- Ask your surgeon to list which activities you can do right away.