

Meniscus Tear

A torn meniscus is one of the most common knee injuries. Any activity that causes you to forcefully twist or rotate your knee, especially when putting your full weight on it, can lead to a torn meniscus. Even kneeling, deep squatting or lifting something heavy can sometimes lead to a torn meniscus. In older adults, degenerative changes of the knee can contribute to a torn meniscus with little or no trauma.

Each of your knees has two C-shaped pieces of cartilage that act like a cushion between your shinbone (tibia) and your thighbone (femur). A torn meniscus can cause pain, swelling and stiffness with limited motion, such that you may not be able to fully flex or extend your knee.

Conservative treatment, such as rest, ice and medication, is sometimes enough to relieve the pain of a torn meniscus and give the injury time to heal. In some cases, the meniscus does not heal and symptoms persist requiring surgical intervention.

Symptoms

If you've torn your meniscus, you might have the following signs and symptoms in your knee:

- A popping sensation
- Swelling or stiffness
- Pain, especially when twisting or rotating your knee
- Difficulty straightening your knee
- Feeling as though your knee is locked in place
- Feeling of your knee giving way

Contributing Factors

Performing activities that involve aggressive twisting and pivoting of the knee puts you at risk of a torn meniscus. This is particularly true for athletes, especially those who participate in contact sports, such as football, lacrosse, or activities that involve pivoting, such as tennis, soccer or basketball.

For older individuals, especially those that are overweight, wear and tear can lead to a degenerative tear of the meniscus.

Diagnosis

Following information gathered during the history of your injury, the physical examination will help identify a torn meniscus. After watching the way you walk or maybe squat, your doctor will move your knee into different position and touch areas of tenderness in an effort to pinpoint the cause of your symptoms.

Imaging Tests

- **X-rays.** Because a torn meniscus is made of cartilage, it will not show up on X-rays, but X-rays can help rule out other problems with the knee that cause similar symptoms, such as osteoarthritis or a loose body.
- **MRI.** A MRI will produce detailed images of both hard and soft tissues within your knee and is the best imaging study to detect a torn meniscus.

Types of meniscus tears

There are several ways of classifying meniscus tears based upon the location, the specific tear pattern or proximity to the blood supply. The tears may be located in the inner, outer or middle third of the meniscus, with tears in the outer third having the best chance of healing, due to better blood supply.

Tears may be located in the following areas of a meniscus disc:

- Anterior horn
- Body
- Posterior horn

These are the most common tear patterns that occur in meniscus injuries:

- Degenerative complex tears
- “Bucket handle” tear patterns
- Flap tears
- Horizontal “cleavage” tears
- Longitudinal, peripheral tears
- “Parrot beak” tear patterns

- Radial tear patterns

Treatment

Treatment for a torn meniscus often begins conservatively, depending on the type, size and location of your tear.

Tears associated with arthritis often improve over time with treatment of the arthritis, so surgery usually is not indicated. Many tears that are not associated with locking or a block to knee motion will become less painful over time and do not necessarily require surgery.

Nonoperative Treatment

- **Rest.** Avoid activities that aggravate your knee pain, especially any activity that causes you to twist, rotate or pivot your knee. If your pain is severe, using crutches or a cane can take pressure off your knee and help improve symptoms.
- **Ice.** Ice can reduce knee pain and swelling. Use a cold pack for about 15 minutes every four to six hours the first day or two at a time, keeping your knee elevated.
- **Medication.** Over-the-counter pain relievers, such as Tylenol, Advil or Aleve, also can help ease knee pain.
- **Physical Therapy.** Physical therapy can help you strengthen the muscles around your knee and improve your knee motion.

Surgery

If your knee remains painful despite non-operative treatment or if your knee locks, your doctor might recommend a surgical arthroscopy. This procedure is performed as same day surgery in a hospital. While under anesthesia, an arthroscope is placed into the knee joint along with small instruments through small incisions. It is sometimes possible to repair a torn meniscus, especially in adolescents and young adults. If the tear cannot be repaired, the meniscus will be surgically trimmed or removed. After surgery, you will need to do exercises to increase range of motion, and maintain knee strength and stability.

