

Meniscal tears

What is the meniscus?

One of the most commonly injured parts of the knee, the meniscus (meh-nis'-kuss) is a wedge-like rubbery cushion where the major bones of your leg connect. Meniscal tissue curves like the letter "C" at the inside and outside of each knee. A strong stabilizing tissue, the meniscus helps the knee joint carry weight, glide and turn in many directions. It also keeps your femur (thigh-bone) and tibia (shinbone) from grinding against each other.

Who is at risk?

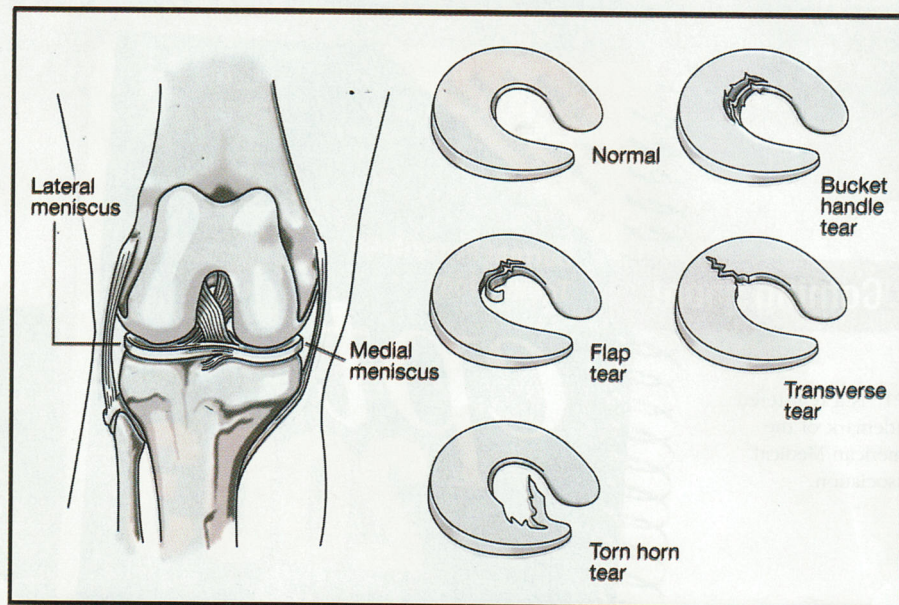
- Football players and others in contact sports may tear the meniscus by twisting the knee, pivoting, cutting, or decelerating. In athletes, meniscal tears often happen in combination with other injuries such as a torn anterior cruciate ligament (ACL).
- Older people can injure the meniscus without any trauma as the cartilage weakens and wears thin over time, setting the stage for a degenerative tear.

Signs and symptoms

You might experience a "popping" sensation when you tear the meniscus. Most people can still walk on the injured knee and many athletes keep playing. When symptoms of inflammation set in, your knee feels painful and tight. For several days you have:

- Stiffness and swelling.
- Tenderness in the joint line (where the thighbone meets the shinbone).
- Collection of fluid ("water on the knee").

Without treatment, a fragment of the meniscus may loosen and drift into the joint, causing it to slip, pop or lock—your knee gets stuck, often at a 45-degree angle, until you manually move or otherwise manipulate it. If you think you have a meniscal tear, see your orthopaedist right away for diagnosis and individualized treatment.



Diagnosis

Tell your orthopaedist exactly what happened and when. He or she may conduct physical testing to evaluate the extent of your meniscal tear. You may need X-rays to rule out osteoarthritis or other possible causes of your knee pain. Sometimes your doctor may use a magnetic resonance image (MRI) to get a better look at the soft tissues of your knee joint. Your orthopaedist may also use a specialized instrument (arthroscope) to see into your knee joint, especially if your knee locks.

There are several kinds of meniscal tears:

- Young athletes often get longitudinal or "bucket handle" tears if the femur and tibia trap the meniscus when the knee turns.
- Less commonly, young athletes get a combination of tears called radial or "parrot beak" in which the meniscus splits in two directions due to repetitive stress activities such as running.
- In older people, cartilage degeneration that starts at the inner edge causes a horizontal tear as it works its way back.

Conservative treatment

Initial treatment of a meniscal tear follows the basic RICE formula: rest, ice, compression and elevation, combined with nonsteroidal anti-inflammatory medications for pain. If the knee is stable and does not lock, this conservative treatment may be enough. Blood vessels feed the outer edges of the meniscus, giving that part the potential to heal on its own. Small tears on the outer edges often heal themselves with rest.

Surgical repair

If the meniscal tear does not heal on its own and the knee becomes painful, stiff or locked, you may need surgical repair. Depending upon the type of tear, other injuries, your age and other factors, your orthopaedist may trim off damaged pieces of cartilage during arthroscopic surgery.

A cast or brace immobilizes your knee after surgery. You must complete a course of rehabilitation exercises before gradually resuming activities.

Your Orthopaedic Connection: <http://orthoinfo.aaos.org>, the patient education Web site of the American Academy of Orthopaedic Surgeons.