

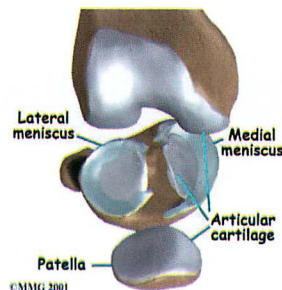
About Meniscal Tears

Knee Anatomy

- There are two menisci in between the thigh bone (femur) and shin bone (tibia)
 - Medial meniscus: on the inside of the knee, "C" shaped
 - Lateral meniscus: on the outside of the knee, "U" shaped
- The menisci act like shock absorbers in the knee and help spread out forces that are transmitted across the joint.
 - Walking puts up to 2 times your body weight on the knee joint.
 - Running puts up to 8 times your body weight on the knee joint.

Long Term Effects of Meniscal Tears

Articular cartilage is a smooth material that covers the ends of the bones that make up the knee joint, allowing the bones to slide against each other without damaging either surface. With a torn meniscus, the forces that are transmitted across the knee joint are concentrated onto a small area, leading to damage/degeneration of the articular cartilage which is known as osteoarthritis.



What Causes Meniscal Tears?

- In younger people, the menisci are tough and rubbery, and tears usually occur due to a forceful twisting injury.
- The menisci weaken with age, so older people can experience meniscal tears from minor stresses to the knee such as repetitive squatting. Many times, older individuals do not have one traumatic injury that resulted in a meniscal tear. Meniscal tears can result from the cumulative effect of years of stresses on the knee.

Symptoms

Common symptoms of a torn meniscus include the following:

- Pain along the edge of the knee joint
- Swelling and stiffness
- Feeling like the knee is going to buckle
- "Locking" of the knee such that the knee cannot be completely straightened. This occurs in larger tears when a fragment of the torn meniscus gets caught in the hinge of the knee joint.

How Physical Therapy Can Help

Physical Therapy can help patients with meniscal tears in a number of ways.

- Modalities (heat/ice, electric stimulation, ultrasound) to decrease pain/inflammation and promote healing
- Therapeutic exercises to strengthen muscles of the knee and hip to decrease stress on the knee joint
- Manual techniques to improve knee range of motion (ROM)
- Personalized home exercise program to maintain strength/flexibility outside of therapy
- Education on body mechanics, technique modifications to prevent future recurrence

With physical therapy, many patients gain relief from their meniscal tear symptoms and are able to return to full activity with improved strength and flexibility.

