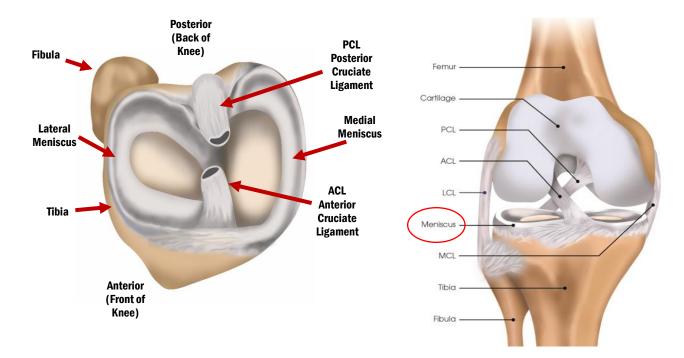
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Meniscus Tear

The meniscus is a C-shaped fibrocartilaginous structure in the knee that sits on top of the tibia (shin bone). Each knee has two menisci, a medial (inner) and lateral (outer) meniscus. The meniscus functions like an adapter between the rounded femur (thighbone) and flat tibia (shin bone).



The meniscus serves to help distribute the forces over a greater surface area of the two bones, helps trap synovial joint fluid and supply nutrition for the articular cartilage on the end of the bones and helps stabilize the knee. The meniscus is fibrocartilage (rubbery tissue) that loses its elasticity (suppleness) and wears with age. Meniscus tears are very common, occurring in up to one third of all sports injuries. The medial (inner) meniscus is injured most often.

Frequent Signs and Symptoms

- Pain and tenderness along the joint of the knee, especially with standing on the affected leg and twisting or squatting,
- Swelling of the affected knee days after the injury, may occur right after the injury or can be delayed by 1-2 days after the injury.
- Locking or catching of the knee joint, causing an inability to straighten the knee completely
- Giving way or buckling of the knee



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Etiology (Causes)

- Indirect forces to the knee while twisting, pivoting, or cutting (rapidly changing direction while running), as well as kneeling or squatting
- Wear and tear, degeneration

Risk Factors

- Contact sports (football), sports in which cleats are used with pivoting (soccer) or sports in which good shoe grip and sudden change in direction are required (racquetball, basketball, squash)
- Previous knee injury
- Associated knee injury, particularly ligament injuries
- Poor physical conditioning (strength and flexibility)

Prevention

- Appropriately warm up and stretch before practice or competition.
- Maintain appropriate conditioning:
 - Lower extremity strength
 - Flexibility and endurance
- Though not proven effective, some patients find wearing a brace, wrap or tape effective for personal comfort or support during sport or activity.
- Wear proper protective equipment and ensure correct fit, including proper cleats for the surface.

Outcomes

Meniscal injuries do not heal on their own but may not cause symptoms. The only definitive treatment for symptomatic (painful) meniscal tears is surgery. Surgery can excise (trim) the tear or can repair it depending on the condition of the meniscal tissue and the pattern of the tear.

Potential Complications

- Frequent recurrence of symptoms, resulting in a chronic problem; appropriately addressing the problem decreases frequency of recurrence
- Repeated knee injury, particularly if sports are resumed too soon after injury or surgery
- Progression of the tear (the tear gets larger) if untreated
- Arthritis of the knee in later years (with removal of tear or without surgery)

Complications of surgery, including infection, bleeding, injury to nerves (numbness, weakness, paralysis) continued pain, giving way, locking, nonhealing of meniscus (if repaired), need for further surgery, and knee stiffness (loss of motion), stress fracture, and progression of arthritis.





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Treatment Considerations

Initial treatment consists of medications and ice to relieve pain and reduce the swelling of the affected joint. Sometimes walking with crutches until you can walk without a limp is recommended (you may put full weight on the injured leg). Range-of-motion, stretching, and strengthening exercises may be carried out at home, although referral to a physical therapist or athletic trainer may be recommended. A single steroid injection can reduce swelling and pain and may assist with non-operative treatment. Surgery can simply trim nonrepairable tears back to stable edges, or surgery can also repair some meniscal tears. Meniscectomy surgery to trim the meniscus is a short recovery of less than 6 weeks but sometimes can be longer. Meniscal repair is successful 80% of the time and requires 6 weeks in a brace with crutches followed by a total of 4-6 months to recover.

Possible Medications

- Nonsteroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take
 within seven days before surgery), or other minor pain relievers, such as acetaminophen,
 are often recommended. Take these as directed by your physician. Contact your physician
 immediately if any bleeding, stomach upset, or signs of an allergic reaction occur.
- Pain relievers may be prescribed as necessary by your physician. Use only as directed and only as much as you need.

Modalities (Heat and Cold)

- Cold is used to relieve pain and reduce inflammation. Cold should be applied for 15-20 minutes every two to three hours for inflammation and pain and immediately after any activity that aggravates your symptoms. Use ice packs or an ice massage with a cloth between the ice and your skin to prevent burning /freezing your skin.
- Heat may be used before performing stretching and strengthening activities prescribed by your physician, physical therapist, or athletic trainer. Use a heat pack or a warm soak.

Notify My Office If Symptoms Worsen





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