



DISCOID MENISCUS

■ ■ ■ Description

The meniscus is a cartilage structure in the knee that sits on top of the leg bone (tibia). Each knee has two menisci, an inner and an outer meniscus. The meniscus functions like an adaptor between the rounded thigh bone (femur) and flat tibia. It also serves to help distribute the forces between the two bones over a greater area (rather than point to point), helps supply nutrition to the cartilage that lines the bones (articular cartilage), and helps stabilize the knee. A discoid meniscus is a congenital (born with) variant of the normal meniscus. Instead of being shaped like a cashew nut, the meniscus is more oval or disk shaped. Occasionally it has a normal shape with abnormal attachment to the surrounding structures. It tends to occur in the outer (lateral) meniscus. The meniscus may cause symptoms without injury or can cause symptoms when torn or injured.

■ ■ ■ Common Signs and Symptoms

- Often, no symptoms at all
- Snapping or clunking of the knee with motion
- Pain, especially with standing on the affected leg, and tenderness along the joint of the knee
- Swelling of the affected the knee noted 1 to 2 days after the injury, although it may occur right after the injury
- Locking of the knee (cannot straighten the knee completely)
- Giving way or buckling of the knee

■ ■ ■ Causes

The cause is unknown, but discoid meniscus is thought to be a developmental or congenital problem

(you are born with it). It can occur in both knees in up to 10% of people with this condition.

■ ■ ■ Risk Increases With

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

Caucasians have a low incidence of this problem (up to 5%), whereas it occurs in up to 25% of Asians.

■ ■ ■ Preventive Measures

- Appropriately warm up and stretch before practice or competition.
- Maintain appropriate conditioning:
 - Cardiovascular fitness
 - Knee strength
 - Flexibility and endurance
- For participation in jumping (basketball, volleyball) or contact sports, protect the knee joint with supportive devices, such as wrapped elastic bandages, tape, or braces (these have not been proven effective).
- Wear proper protective equipment and ensure correct fit, including proper cleats for the surface.

■ ■ ■ Expected Outcome

Some meniscal injuries can heal on their own, and some do not heal but may not cause any symptoms. However, the only definitive treatment for meniscal tears requires surgery. Surgery may provide

complete healing in 6 weeks. If there are no symptoms, there is no known problem with leaving the meniscus alone (no surgery).

■ ■ ■ Possible Complications

- Frequent recurrence of symptoms, resulting in a chronic problem; appropriately addressing the problem the first time decreases frequency of recurrence
- Repeated knee injury, particularly if sports are resumed too soon after injury or surgery
- Progression of the tear (it 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, need for further surgery, and knee stiffness (loss of motion)

■ ■ ■ General Treatment Considerations

If the discoid meniscus is found incidentally and does not cause symptoms, nothing needs to be done. If injured, initial treatment consists of medications and ice to relieve pain and reduce the swelling of the affected joint. Sometimes walking with crutches until you 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. Occasionally your physician may recommend a brace or immobilizer or crutches to protect the joint. Arthroscopic surgery is often recommended as definitive treatment. Usually the tear is removed, although occasionally a repair may be attempted. After surgery or immobilization, stretching and strengthening of the injured, stiff, and weakened joint

and surrounding muscles are necessary. These may be done with or without the assistance of a physical therapist.

■ ■ ■ Medication

- Nonsteroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take within 7 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.

■ ■ ■ Heat and Cold

- Cold is used to relieve pain and reduce inflammation for acute and chronic cases. Cold should be applied for 10 to 15 minutes every 2 to 3 hours for inflammation and pain and immediately after any activity that aggravates your symptoms. Use ice packs or an ice massage.
- 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 Our Office If

- Symptoms get worse or do not improve in 2 weeks despite treatment
- New, unexplained symptoms develop (drugs used in treatment may produce side effects)