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## Meniscal Injuries

The meniscus is a commonly injured structure in the knee.

The injury can occur in any age group.

In younger people, the meniscus is fairly tough and rubbery, and tears usually occur as a result of a forceful twisting injury.

The meniscus grows weaker with age, and meniscal tears can occur in aging adults as the result of fairly minor injuries, even from the up-and-down motion of squatting.

### What is a meniscus, and what does it do?

There are 2 menisci between the shinbone (tibia) and thighbone (femur) in the knee joint.

These two menisci act like shock absorbers in the knee.

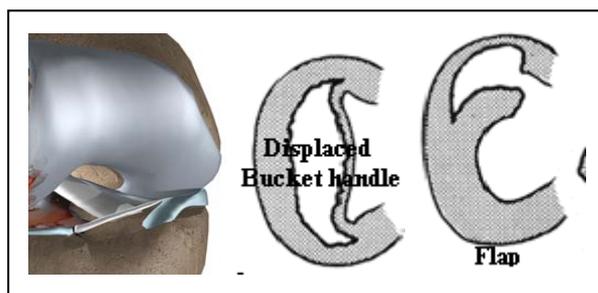
Forming a gasket between the shinbone and the thighbone, they help spread out the forces that are transmitted across the joint.

Walking puts up to two times your body weight on the joint. Running puts about eight times your body weight on the knee. As the knee bends, the back part of the menisci takes most of the pressure.

### The menisci add stability to the knee joint.

By spreading out the forces on the knee joint, the menisci protect the articular cartilage from getting too much pressure on one small area on the surface of the joint.

Without the menisci, the forces on the knee joint are concentrated onto a small area, leading to damage and degeneration of the articular cartilage, a condition called **osteoarthritis**.



### How do meniscal problems develop?

Can occur at any age, but the causes are different for each age group.

In the younger age group, meniscal tears are more likely to be caused by a sport activity. The entire inner rim of the medial meniscus can be torn in what is called a bucket handle tear. The meniscus can also have a flap tear from the inner rim which is common in older age group.

### What does a torn meniscus feel like?

The most common problem is pain. The pain may be felt along the edge of the knee joint.

The knee may swell, causing it to feel stiff and tight.

The knee joint can also lock up if the tear is large enough.

Locking refers to the inability to completely straighten out the knee. This can happen when a fragment of the meniscus tears free and gets caught in the joint.

A torn meniscus can cause long-term problems. The constant rubbing of the torn meniscus on the articular cartilage may cause the joint surface to become worn, leading to osteoarthritis

Magnetic resonance imaging (MRI) is very good at showing the meniscus.

Arthroscopy is an operation that involves inserting a miniature fiber-optic TV camera into the knee joint, allowing the orthopedic surgeon to look at the structures inside the joint directly. The arthroscope lets the surgeon see the condition of the articular cartilage, the ligaments, and the menisci.

Initial treatment for a torn meniscus focuses on decreasing pain and swelling in the knee. Rest and anti-inflammatory medications, such as aspirin, can help decrease these symptoms. You may need to use crutches until you can walk without a limp.

Some patients may receive physical therapy treatments for meniscal problems. Exercises are used to help you regain normal movement of joints and muscles.

### **Surgery**

Torn meniscus may not heal on its own. If symptoms continue after non-surgical treatment, surgery will probably be suggested to either remove or repair the torn portion of the meniscus.

If the knee keeps locking up and can't be straightened out, surgery may be recommended as soon as reasonably possible to remove the torn part that is getting caught in the knee joint. .



Surgeons would rather not take out the entire meniscus. This is because the meniscus helps absorb shock and adds stability to the knee. Removal of the meniscus increases the risk of future knee arthritis.

### **Meniscal Repair**

Whenever possible, a torn meniscus should be repaired rather than removed. Young people who have recently torn their meniscus are generally good candidates for repair. Older patients with degenerative tears are not.

### **After Surgery**

Surgeon may instruct you to place a comfortable amount of weight on your operated leg using a walking aid.