

Patient Information: Meniscus Injuries

Introduction

Every joint in the body is lined by extremely smooth tissue called “articular cartilage.” The articular cartilage of the knee coats the end of the femur (thigh bone), the top surface of the tibia (shin bone) and the back surface of the patella (kneecap). This smooth cartilage allows the surfaces of your knee joint move without friction, pain and minimal wear. In between these moving surfaces is special ‘C’ shaped tissue that function mainly as shock absorbers protecting the joint cartilage. This tissue is called the ‘meniscus’.

Each knee has two menisci, one on the inner side (medial meniscus) and one on the outer side (lateral meniscus). The menisci also assist with stability of the knee joint as well as helping disperse fluid around the knee joint effectively.

What is a meniscal tear?

The menisci are at risk of tearing due to their constant exposure to repetitive loading as we walk, run or perform other activities. An acute traumatic meniscal tear usually develops when the knee is partially bent under load, especially with twisting motions such as pivoting during sports, squatting and changing direction. Tears can also occur in combination with tears of ligaments around the knee (eg an ACL tear). It is also possible to injure a meniscus without any trauma as the meniscus stiffens and weakens with age.

What symptoms can you experience with a meniscal tear?

You might experience a crack or a popping sensation when you initially tear your meniscus. However on many occasions you may not have had a precipitating event or injury. The pain from a meniscal tear is often localised to the inner or outer part of the knee joint, and less so at the front of the joint. Symptoms include pain with bending and twisting on your knee, and sometimes pain at night. Often people with meniscal tears complain of stiffness within the joint, recurrent swelling of the knee joint (“water on the knee”), or a sensation of catching or locking of the knee.

Some meniscal tears are very large. Depending on their pattern, a fragment of the damaged meniscus may loosen partially and drift into the knee joint. When this occurs the fragment may cause a block to movement and the knee becomes locked, limiting your ability to straighten or bend your knee.

Diagnosis

Your doctor will take a thorough history and examination to assess for all the symptoms and signs of a meniscal tear. As part of your workup, x-rays will be ordered to exclude other conditions in the knee such as arthritis or pieces of floating, loose bone within the joint. Additionally you may undergo a test called an MRI (magnetic resonance imaging scan) which looks more specifically at the soft tissues within the knee, especially the meniscus and the articular cartilage.

