

Knees – Meniscal Tears

The menisci are pads of fibrocartilage that sit in the knee joint between the joint surfaces of the femur and the tibia. They are semicircular and each knee has two menisci, medial and lateral (Inner and outer), which face each other. They are vulnerable to injury like most soft tissues and don't have very good blood supply. In fact, the inner parts of the menisci are *avascular*, which means they don't have any blood supply at all.

The areas of the menisci are sometimes referred to as Red, Red-White and White in reference to how close they are to the blood supply. The outcome of meniscal tears depends a lot on where the tear occurs, as a tear in the avascular or white area may not heal at all. Tears in the red area have a much better chance of healing than tears in the white area.

HOW DO THEY BECOME TORN?

For some unlucky people, the menisci can be torn from very simple activities, such as walking or squatting. Other times it is due to a traumatic injury, with the usual mechanism being a twisting of the knee while it is bent and weight bearing. The meniscus can also tear over time, usually as you get older, these type are referred to as degenerative tears.

WHAT ARE THE SYMPTOMS?

Usually the patient will experience pain and swelling in the knee, which is increased when bearing weight. They might not be able to straighten the knee fully and there may also be clicking and popping inside the knee with movements. It is common for the knee to suddenly give way and many patients report pain when turning over in bed at night.

WHAT HAPPENS IF THERE IS A TEAR?

Clinical tests will cause clinicians to suspect a meniscal tear, which is usually confirmed with an MRI scan. A specialist will decide if surgery is appropriate, which will largely depend on the size and shape of the tear and most importantly, where it lies in relation to the red/white areas. They have the option to repair or remove the torn area, however in some cases they take out the entire meniscus.

HOW CAN PHYSIOTHERAPY HELP?

Physiotherapy plays an important role in both the healing of tears without surgery and rehabilitation after surgery. Often a surgeon will recommend a few weeks of physiotherapy treatment before proceeding with surgery to see if natural healing can occur.

In both cases treatment is aimed at reducing pain, swelling and stiffness. It will also help to restore movement in the joint, which is often lost after an injury like this. Proprioception (joint position sense) and balance often require retraining which is necessary for preventing future injuries.

One of the most important factors in meniscal tear rehabilitation is strengthening the muscles around the knee joint, so they can contribute more to shock absorption of the joint and take over the function of the damaged meniscus.

Each person and their injury are always different and your physiotherapist will prescribe a treatment regime that is suitable for you.

