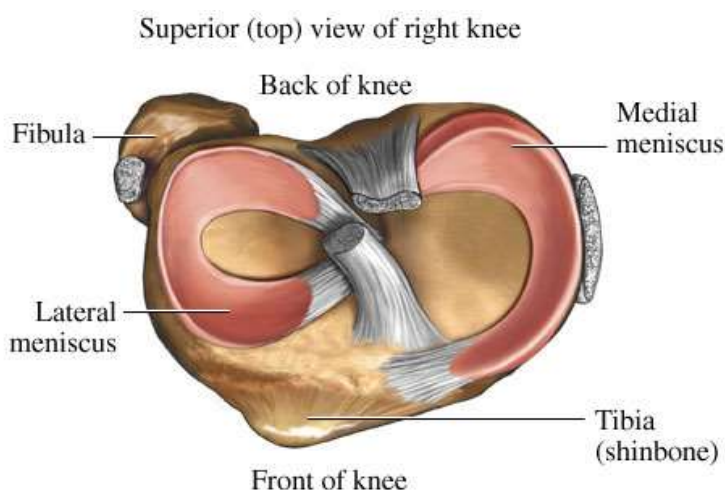


Degenerative Meniscus Tears of the Knee

The meniscus is a semi-circular shaped cartilage within the knee. Each knee has two of these, together termed menisci. The two menisci are located between the main knee bones (*tibia and femur*). There is one on the inner aspect of the knee (*medial*) and one on the outer (*lateral*).



What is the Purpose of the Menisci?

The menisci have several important functions:

- Shock absorption.
- Enables even transmission of forces and loads through the knee (50-70%).
- Increase knee joint stability (*similar to how a wheel chock supports an airplane wheel*).
- Provide nutrition to the knee joint surfaces.
- Joint lubrication.
- Helps with joint sensation (*proprioception*).

What Causes a Meniscal Tear?

The meniscus can tear as a result of a sudden trauma, such as a twisting injury, which are called acute meniscal tears. They can also tear gradually as part of the osteoarthritis (*normal age-related change to the knee*). These are called degenerative meniscal tears. An acute tear is more likely to occur in the younger population. A degenerative tear is common from about the age of 35 upwards, and there may be no history of a trauma. 75-95% of people with knee osteoarthritis are likely to have a degenerative meniscal tear.

Risk Factors

- Age (>60 years of age)
- Gender (more common in males than females)
- Weight (being overweight causes more forces through the knee)
- Reduced flexibility (causes reduced range of motion which can alter force transmission through the knee)
- Muscle weakness (particularly in muscles in the hip, bottom and front of the thigh leads to reduced control and efficiency of walking)

What are the Signs and Symptoms?

People with meniscal tears commonly present with the following symptoms:

- Pain which can be severe within the joint or on the inner/outer aspect of the joint line (*especially when twisting, standing up from sitting or squatting*)
- Tenderness to touch across the knee Joint line
- Some swelling around the knee (~50% will have this)
- **Difficulty fully straightening or bending the knee**
- **Locking of the knee (*it is important to distinguish whether the knee is stiff or whether you are experiencing a true locking where the knee gets stuck*)**
- **Joint instability (*loss of wheel chock effect*)**

When to Contact Us?

If you are experiencing the combination of symptoms in bold in combination with **severe pain** please contact the service via the self-referral on the Sussex MSK Partnership website.

How are Degenerative Meniscus Injuries Treated?

Conservative treatment through physiotherapy is the first and best line of treatment for degenerative meniscal tears.

Conservative treatment consists of:

Pain relief

- Ice/frozen peas (wrapped in tea towel, 10-20mins, 2-3x per day).
- Activity modification or rest from aggravating factors if possible.
- Basic painkillers from your local pharmacy.
- Contact your GP for stronger analgesia if your pain is not well controlled with paracetamol.

Exercise Therapy

- Stretches - *help to improve the movement of the knee which can improve force transmission through the knee.*
- Leg strengthening exercises – *help to offload the knee by improving ability of the muscles of the hip, thigh and calf to control forces through the knee.*
- Balance exercises – help with control of movement.
- Low impact cardiovascular exercise.

Weight loss

- For every 1kg of weight loss, the load through knee is reduced by 2.2kg at any given walking speed and thus helps to reduce painful compression.
- Choose a healthy balanced diet and monitor your portion sizes as you will unlikely be exercising as much as normal due to knee pain.