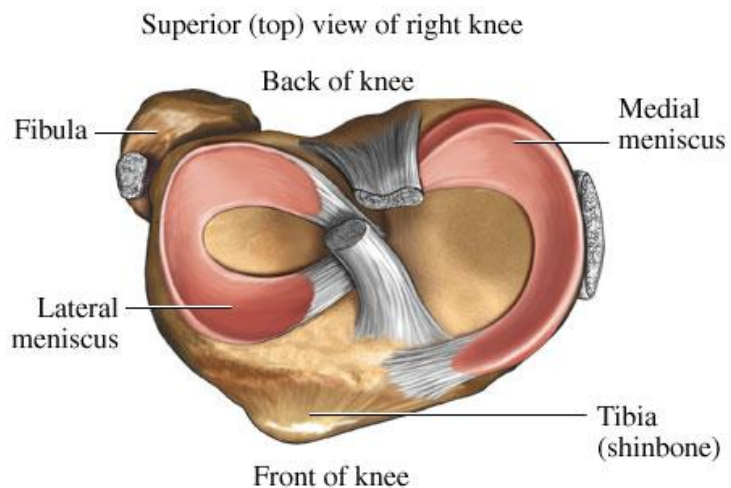
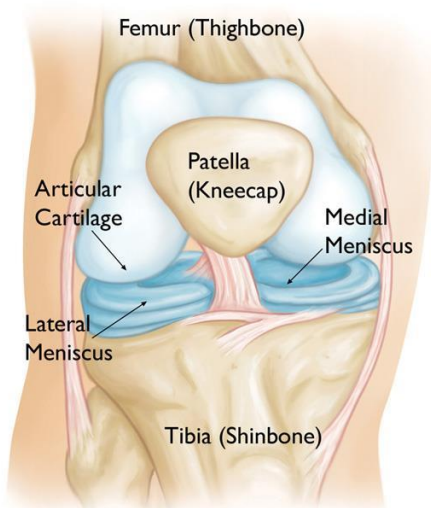


# Degenerative Meniscus Tears of the Knee

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.