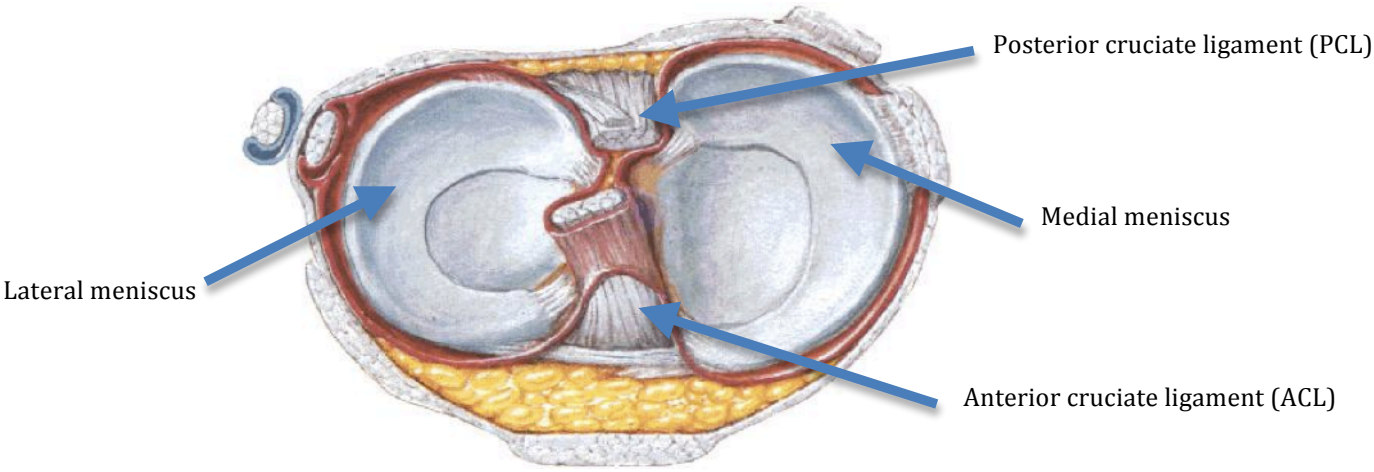
Meniscal Injuries

What are they?

Each knee joint has two crescent-shaped cartilage menisci. These lie on the medial (inside of knee) and lateral (outside of knee) of the upper surface of the tibia (shin) bone. They are essential components of the knee, acting as shock absorbers as well as allowing for the proper interaction and weight distribution between the tibia and the femur (thigh bone). As a result, injury to either meniscus can lead to critical impairment of the knee itself.



How do they occur?

The medial meniscus is more commonly injured than the lateral meniscus. The most common mechanism of injury is a twisting injury with the foot anchored on the ground, often by another player's body. The twisting component may be a relatively slow speed. It is commonly seen in sports such as football, basketball and netball. The degree of pain associated with this injury varies. Some people report a pop or tearing sensation at the time of the injury. A small tear may cause no immediate symptoms but typically pain and swelling increases over time (24 – 48 hrs). Small tears may also occur in the older population with only very minimal twisting or trauma as a result of degenerative changes to the meniscus. It is also worth noting that meniscal injuries often occur with ACL tears.

What are the signs and symptoms?

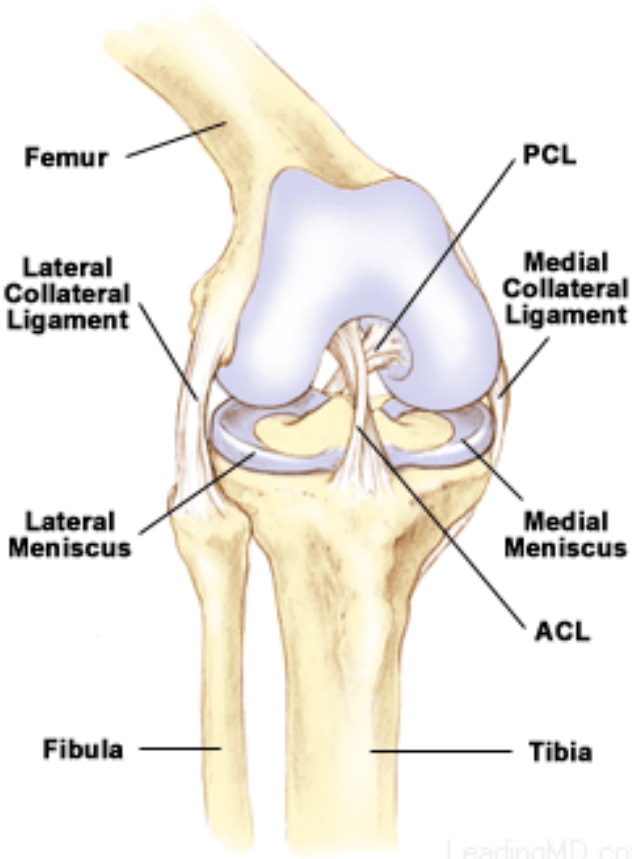
Individuals who experience a meniscus tear usually experience pain and swelling as their primary symptoms. A severe meniscal injury can be very painful and restrict range of motion. Another common complaint is joint locking, or the inability to completely straighten the joint. This is due to a piece of the torn cartilage physically impinging the joint mechanism of the knee. This may unlock spontaneously with a clicking sensation.

The most common symptoms of a meniscus tear are:

- Knee pain
- Swelling of the knee
- Tenderness when pressing on the meniscus (knee joint line)
- Pain with squatting
- Popping or clicking within the knee
- Limited motion of the knee joint

What can the patient do?

- Apply RICE to the injured knee.
- Try to keep the knee moving using gentle exercise.
- Consult a physiotherapist.



What can physiotherapy do?

Your physiotherapist will be able to perform a few tests to determine whether there is a meniscal injury. However not all meniscus injuries are positive on testing and an MRI scan may be necessary to diagnose the injury.

Your physiotherapist should be able to:

- Assess the knee to confirm the injury.
- Refer you for an MRI scan.
- Decide if conservative treatment will be effective or if surgery may be required.

The treatment of meniscal injuries varies considerably depending on the severity of the injury. Normally small tears or degenerative tears can be treated conservatively with physiotherapy. More severe tears or joint locking will require surgical intervention.

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Conservative Treatment:
This may be indicated in the case of a small tear or a degenerative meniscus and may involve:

- RICE - Rest, Ice, Compression and Elevation
- Electrotherapy may be indicated
- Massage to decrease swelling and relax surrounding muscular tension
- Manual therapy and stretching
- Once pain has subsided - exercises to restore the range of movement, improve balance and maintain quadriceps strength may be prescribed. These may include: squatting, single calf raises and balance/postural control exercises.
- Progressive return to sports/activities

Surgical Intervention:

In the event of more severe meniscal tears such as joint locking, arthroscopic surgical procedures may be necessary to repair the lesion. The aim of surgery is to preserve as much of the meniscus cartilage as possible. This can mean either stitching the tear or removing the region of torn cartilage depending on the location and severity of the tear and the age and physical condition of the patient. Younger and fitter patients are known to have better outcomes.

Following surgery a rehabilitative exercise program will be outlined for the patient, which may include mobility, strengthening and balance/postural control training. Full co-operation with the rehabilitative process will be necessary to maximise recovery.

Following surgery, physiotherapy can assist by:

- Reducing pain and swelling.
- Restoring range of motion in the joint.
- Graduated weight bearing exercises.
- Progressive strengthening.
- Maintain strength and fitness of other parts of the body.
- Return to functional activities – sport, gardening etc.

The time frame for recovery for such an injury may vary depending on the degree of the injury. Consult with your physiotherapist as to how long it may take you to recover.

Remember

- **Seek treatment at an early stage.**
- **Ensure your physiotherapist provides you with methods of self treatment.**

If you have any questions regarding this information or your physiotherapy management, please don't hesitate to call Physiocare on 07 5443 5695.