

## Meniscal Tear / Cartilage Injuries.

### What is a meniscus?

A part of the knee commonly injured while playing football is the meniscus. The meniscus is a 'wedge-like rubbery cushion', which connects the bones of the knee together. Meniscal cartilages are shaped like the letter "c" at the inside and outside of the player's knee, providing a strong stabilizing tissue (See Figure 1). The meniscus helps the knee joint carry weight, glide and turn in many directions. It also acts as a shock absorber and keeps the thigh-bone and shin bone from grinding against each other.

Football players may tear the meniscus when twisting the knee, pivoting and decelerating. A football player's meniscal tear will often happen in combination with other injuries such as a torn medial collateral or anterior cruciate ligament (See Figure 2).

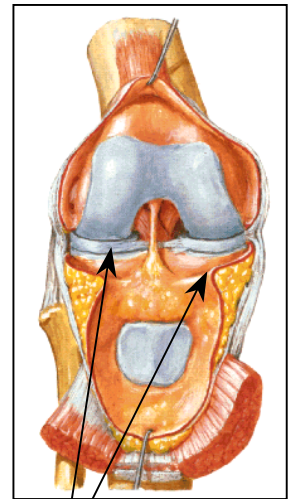


Figure 1: Meniscus.

### What are the causes of a meniscal injury?

Football players often injure their meniscus during a tackle or when changing direction. A meniscus injury can take many different forms depending on the forces and angle of a player's injury. A common mechanism of injury is when the femur and tibia trap the meniscus while the knee turns in a tackle.



Figure 2: Meniscus Injury.

### What are the signs and symptoms?

A player might experience a "popping" sensation when you tear the meniscus. Most players can still walk on the affected leg, but many football players will have to stop playing. When symptoms of inflammation set in, a player's knee will feel painful and over several days they may develop stiffness and tenderness in their knee joint. The player may notice swelling around the knee.

Without treatment, a fragment of meniscus could loosen and be floating in the knee joint. The knee may get stuck, often at a difficult angle and the player will then have to manually move their knee. If a player suspects they may have a meniscal tear they should see a sports injury professional as soon as possible for a diagnosis.

## What can the player do?

The player should initially rest from football – it is highly unlikely that they will be able to continue playing effectively. If they are in severe pain and have difficulty walking crutches may be necessary. The player should use the RICE (Rest, Ice, Compression, Elevation) method of treatment to reduce the swelling and pain (See Figure 3). The player should see a sports injury professional for advice on a diagnosis and rehabilitation.

### TREAT INJURIES QUICKLY TO SPEED UP YOUR RECOVERY

<p><b>USE R.I.C.E.D. (FIRST 2 DAYS)</b></p> <p><b>R</b>EST: To limit further damage, avoid moving the injured part as much as possible.</p> <p><b>I</b>CE: For 20 minutes every two hours for the first 48 hours.</p> <p><b>C</b>OMPRESSION: Bandage between ice treatments.</p> <p><b>E</b>LEVATION: Keep the injured area raised as much as possible.</p> <p><b>D</b>IAGNOSIS: If the pain or swelling hasn't gone down significantly in 48 hours, seek professional medical help.</p>	<p><b>AVOID H.A.R.M. (FIRST 3 DAYS)</b></p> <p><b>H</b>EAT: Avoid hot baths and showers, saunas, hot water bottles, heat packs and liniments.</p> <p><b>A</b>LCOHOL: Alcohol increases bleeding and swelling at the injury site, and delays healing.</p> <p><b>R</b>UNNING: You should not exercise for 72 hours unless approved by a medical professional.</p> <p><b>M</b>ASSAGE: Massaging an injury in the first 72 hours can slow down recovery.</p>
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Figure 3: R.I.C.E. Treatment.

## What can a sports injury professional do?

The sports injury professional (usually a sports doctor or physiotherapist) will conduct an examination to test and evaluate the knee. The player may need x-rays to rule out any other possible causes of the knee injury. Sometimes a sports doctor may order an MRI scan to get a better look at the soft tissue structures of the knee joint.



Figure 4: Strengthening.

One diagnosed a sports injury professional will begin the initial treatment of the player's meniscal tear. The RICE treatment (Rest, Ice, Compression, and Elevation), along with anti-inflammatory medications will be instigated. If the player's knee is stable and does not lock, physiotherapy and rehabilitation exercises will be prescribed. These include stretching and strengthening exercises (See Figure 4).

Small tears on the outer edges often heal themselves with rest. However, occasionally surgical intervention is needed to treat the meniscus. Depending upon the nature of the meniscal injury, the player's age, and level of participation in soccer a specialist may use an arthroscope to "trim off damaged pieces of cartilage" (See Figure 5). The player will need to complete some rehabilitation after surgery, usually supervised by a physiotherapist. A physiotherapist will then advise the player on a return to running, training and playing football.

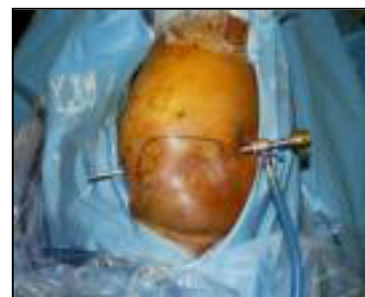


Figure 5: Arthroscopy.