

## Sciatica.

### What is Sciatica?

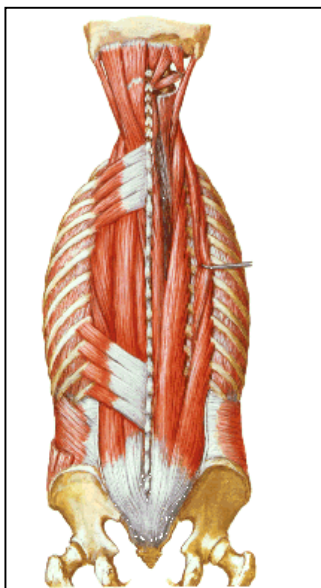
Sciatica is pain that starts in the lower back and radiates down the legs. It is caused by ‘pressure’ on the sciatic nerve, which runs down the back of the leg into the foot. The cause of this ‘pressure’ can be diverse - from a ‘slipped’ or ‘prolapsed’ disc or muscle spasm/tension to something less common such as tumours and bony growths of the spine (See Figure 1).



Figure 1: “Sciatica”



Figure 2: “Sciatica”.



Muscles of the Lower Back.

Where the sciatic nerve is irritated will determine where the player will feel the pain. The pain can radiate to the front of the knee or right down the back of the leg to the foot (See Figure 1).

The diagnosis of “sciatica” simply means that there is an irritation of the sciatic nerve, the largest nerve in the body. This large nerve is formed from the lower segments of the spinal cord exits the lower part of the spinal cord (lumbosacral region), passes through the hip joint and runs down the back of the thigh (See Figure 3).

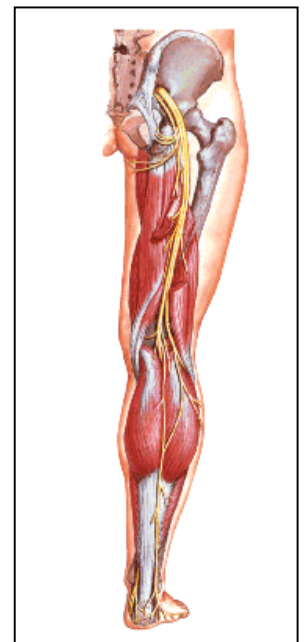


Figure 3: The Sciatic Nerve.

### What causes sciatica?

There are many different causes of sciatica. One of the most common causes of sciatic is a ‘slipped’, ‘herniated’, or ‘prolapsed’ disc. These terms are all-interchangeable words used to describe an injury to the players disc. When an injury to the players disc occurs the normal cushion between the vertebra of the spine ruptures. This causes the disc to push out into areas normally occupied by the sciatic nerve. The nerves are then ‘compressed’ or ‘irritated’ and the symptoms of pain, weakness and numbness can be experienced (See Figure 4).

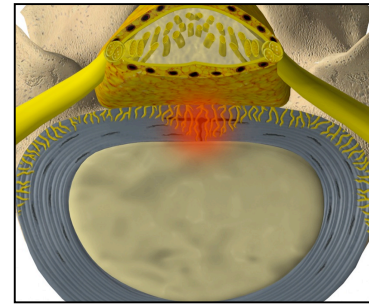
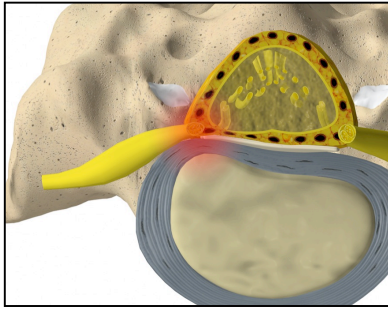


Figure 4: Prolapsed Disc.

Less common conditions that cause sciatica include spinal stenosis, spondylolisthesis, stress fractures and muscle spasm and tightness (See Figure 5).



Figure 5: Muscle Spasm.

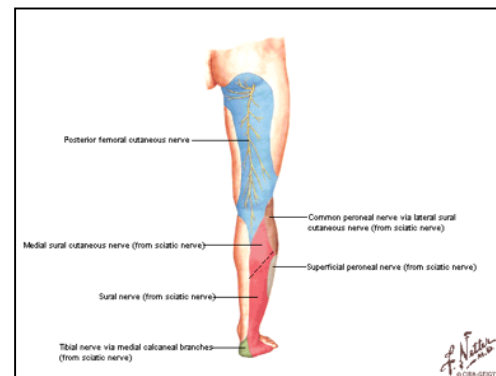


Figure 5A: Pain Patterns.

### What are the signs and symptoms?

The signs and symptoms of sciatica are very variable from player to player and are dependent on the cause of the sciatica. Sciatica can originate from a specific incident such as a collision while playing football or occur gradually over time. The player may describe “tingling”, or “pins and needles” sensations in the legs and thighs or shooting pains from the buttock, down the back of one leg, and/or a burning or cramping sensation in the thigh (See Figure 5A). Players with sciatica may notice a worsening of their symptoms when bending forward, sitting for long periods, playing football, squatting or coughing. These activities increase pressure around the nerve and increase the symptoms of sciatica.



Sciatica can affect all players – but is uncommon in young players, typically affecting older players from 30-50 years. These players often notice a sudden onset or specific incident that causes the sciatic pain.

## What can the player do?

If a player notices that they have sciatic pain they should rest from training and playing. Pain relief and anti-inflammatory medications can sometimes provide some short-term relief but the player should see a sports injury professional or doctor immediately to find out the cause of the sciatic pain. A sports doctor will take a history and perform a physical examination, to test several specific functions of the nerve and provide a diagnosis.

## What can a sports injury professional do?

After determining the cause of the sciatic pain, the sports injury professional (usually a sports doctor or physiotherapist) can prepare a management plan for the player. Initially, if the player's symptoms are very painful, a sports doctor may prescribe anti-inflammatory or pain relief medication. It is not usual for an x-ray to be ordered unless the symptoms have been present for at least 4 - 6 weeks. A physiotherapist can use sports massage techniques to relax tight muscles and design an exercise programme aimed at restoring and maintaining the players range of movement. These exercises can also help control a player's pain (See Figure 6). Mobilization and manipulation, as well as acupuncture are other physiotherapy techniques that can help control a player's symptoms and help with the recovery (See Figure 7).

If the symptoms of sciatica are severe and are persist for several months, a sports doctor may recommend that an orthopaedic surgeon consider surgical treatment (See Figure 8).



Figure 7: Manipulation.

This is not usually the first option but may be considered in severe cases. Most players with sciatica respond to rest, medications and physiotherapy. The sports injury professional will be able to advise the player on when to return to training and playing football as well as providing advice on any preventative measures needed.



Figure 8: Spinal Surgery.

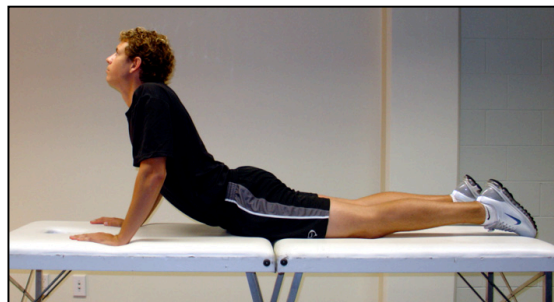


Figure 6: Extension in Lying.