

## **Hamstring Tears**

### **What Is It?**

The hamstrings are a large muscle group located at the back of the thigh that crosses both the hip and knee. Their job is to bend the knee and extend the hip backwards and slow the leg down when striding forwards. The muscles can be torn at any point but are most vulnerable where the tendon and muscle fibres joint together. This is a common injury for players of all sports that involve running, but particularly those that involve quick turns, stops, starts and kicking.

### **What Causes It?**

The hamstrings are prone to injury as they cross over two joints. This means that the job they have to perform is more complicated and sometimes they need to activate quickly in an awkward position. Certain factors increase the chance of a tear, particularly flexibility and neural tension; the ability of the nerves supplying the muscle to move freely. Research also shows that athletes with poor support and posture of their lower back are more likely to have torn their hamstrings in the past. Other factors that contribute to hamstring injuries are muscle imbalance, abnormal lower limb biomechanics, fatigue, inadequate warm-up and environmental factors. However the biggest predictor of a hamstring tear is a previous hamstring tear.

### **How do I know I have torn a hamstring?**

The most common symptom of a torn hamstring is a sharp pain at the back of the thigh, often immediately after intense activity. There may also be swelling, bruising, difficulty walking and pain with resisted knee flexion. The severity of the tear will affect what extent these symptoms are experienced. Physiotherapists use a grading system to classify tears, which helps to guide treatment and give an indication of healing times.

The symptoms of a hamstring tear are similar to many other conditions, the lower back in particular often refers pain to the back of the thigh mimicking a hamstring tear. Consequently, it is important that a correct diagnosis is made early, as treatment will be very different for these two conditions. Your Physiotherapist can confirm that the pain is due to a torn hamstring and tell you how bad the tear is. Although not usually required, diagnosis can be confirmed by having an MRI or real-time ultrasound scan.

### **How can Physiotherapy help?**

Once a diagnosis has been made, the first step is to follow the RICE protocol (Rest, Ice, Compression, Elevation). During the first 48 hours you should apply ice for 20 minutes every 1-2 hours to reduce swelling and bruising. Consultation with your Physiotherapist will include advice about your recovery and when it is appropriate for you to return to sport. Your Physiotherapist has many techniques that can promote healing and reduce scar tissue formation, which may include ultrasound, deep tissue therapy, laser, TENS and dry needling. They will also prescribe an exercise program to return strength, flexibility and control to the muscle, getting you back to your sport quickly and safely.

Due to the high chance of recurrence, rehabilitation is very important and usually takes 6-12 weeks. If the muscle is completely torn, surgery may be required before rehabilitation can start.