

Strains and Sprains Advice Leaflet

Many of us have had a strain or a sprain. However, lots of people don't understand the difference between the two types of injuries.

- A sprain involves a stretching or tearing injury to a ligament, which is a strong fibrous tissue that connects bones to bones and keeps the skeleton in alignment.
- A strain involves a stretching or tearing injury to a muscle or tendon, which connects the muscle to the bone.

Sprains

Sprains frequently occur when a twisting motion accompanies an outstretched limb therefore is commonly seen in ankles, knees and wrists. Think of a runner's ankle twisting sharply inwards or outwards as their foot strikes an unseen crevice in the road or the snowboarder falling on an outstretched wrist. Both of these situations will cause an overstretch or sprain of the ligaments.

Common symptoms that are associated with a sprain include pain, swelling, bruising and a loss of function/ movement in the affected joint. Occasionally a pop or a tear may be reported when the injury occurs.

Sprains are graded into three categories depending on their severity.

Grade 1 (Minor): no tearing of the ligament and no loss of joint function, minor discomfort, minimal swelling and minimal bruising.

Grade 2 (Moderate): Partial tearing of the ligament, reduced function of the joint with decreased weight bearing on affected area. Obvious swelling and bruising.

Grade 3 (severe): Complete tear of the ligament, loss of function of the limb and inability to weight bear on affected area. Widespread swelling, bruising and severe pain. Surgery may be required to restore function in some cases. Occasionally a Grade 3 sprain presented like a fracture and an x-ray is required to differentiate between the two diagnoses.



Strains

Just like a rubber band muscles are designed to stretch, but if they are stretched too far or if they are stretched whilst they are contracting a muscle strain may occur. Strains are often called 'pulled muscles' with hamstrings and back injuries among the most common types. Strains can be acute or chronic in nature. Acute strains relate to a recent injury or trauma such as lifting an object that was too heavy, whilst chronic strains relate to prolonged/repetitive movements that result in an overuse injury.

Strains are also graded based on their severity.

Grade 1 (Mild): Minimal damage to muscle fibres

Grade 2 (Moderate): There is more extensive damage to the muscle fibres but the muscle is not ruptured. Partial contraction of the muscle is still possible.

Grade 3 (Severe): There is a complete rupture of the muscle i.e. a complete tear across the width of the muscle. No contraction of the muscle is possible and the injury may require surgery to return to function in some cases.

Some tips for preventing sports related strains and sprains

- Avoid exercising or playing sports when you are tired.
- Exercise regularly but do not exercise through pain
- Warm up and stretch before commencing sport
- Eat a well balanced diet to keep muscles strong
- Maintain a healthy weight
- Wear shoes that fit well and are in good condition
- Wear appropriate protective equipment



At Pure Physio both initial management and immediate treatment are vital for ensuring rapid recovery from strains and sprains. As a specialist musculoskeletal physiotherapy practise Pure Physio will work with you to identify the nature of your injury and develop a personalised injury treatment plan that will aim for optimal recovery time. If you would like to make an appointment or discuss your condition or have a further enquiry, visit our website www.purephysioclinic.com or call us on 07747444404