

Sports Injuries Management

Sport provides us with exercise which is essential for promoting good health. Sport may be enjoyed by people of all ages. It has been shown to increase fitness, improve circulation, reduce weight, decrease stress and it is also a proven antidepressant.

Sport may also result in injuries, many of which can be prevented. Whether you are an elite athlete or a "Sunday Jogger" sports injuries can be a common and frustrating problem. The good news is that most sports injuries can be effectively treated by your physiotherapist. Proper treatment and advice will enable you to return to your sporting activity as soon as possible following an injury.

Common Sports Injuries

A sports injury may involve damage to one or a number of structures; muscles, ligaments, joints, tendons or bones. The severity of the injury can often be assessed by the degree of pain, swelling and inability to use the damaged limb that results.

Muscle Injuries

Muscle fibres will tear if the muscle is overstretched beyond its normal limits. The injury is known as a muscle *STRAIN*. Muscles commonly affected include the hamstrings, quadriceps, groin and calf muscles. Muscle fibres may also be damaged by direct blows which result in *HAEMATOMAS* (Bruising). For example the "corked" thigh.

Ligament Injuries

A ligament is like a piece of cord which connects bones together and prevents excessive movement. A ligament *SPRAIN* results when ligaments are stretched beyond their normal limits. Ankle and knee ligament sprains are most commonly seen.

Joint Injuries

A joint injury results when one or more bones are partially or fully displaced. A joint *SUBLUXATION* occurs when the bones only partially displace and return to their normal position. A joint *DISLOCATION* results when the bones fully displace and remain out of position. Dislocations are often caused by falls or by collisions with other players. Shoulder dislocations are an example of this type of injury.

Bone Injuries

The most common bone injuries are *FRACTURES*. Fractures can result from a direct blow to the limb. Repetitive trauma that causes gradual bone breakdown is known as a "stress fracture". "Shin splints" are caused by repetitive trauma.

The Body's Response To Injury

Regardless of what structure you have injured the body's response to injury is the same and the following will occur:-

1. Tissue disruption caused by the injury results in damage to blood vessels and subsequent initial rapid bleeding and swelling;
2. Swelling or 'accumulated' blood restricts the normal flow of fresh blood to the tissues (the fresh blood is rich in oxygen);
3. The lack of oxygen in the area of the injury will cause cells to die thereby increase the extent of the injury;
4. The clot may 'leak' or bleed if disrupted, causing extra swelling and pain, which increases the extent of the injury.

Following the healing process, all tissue is replaced with scar tissue. The scar tissue is not as flexible as the 'normal' tissue so flexibility must be regained with physiotherapy and suitable exercises.

Treatment Of Sports Injuries

Immediate management of sports injuries should follow the **R I C E D** regime.

- R** *Rest* and perform only pain free (limited) activity. The injured tissue needs time to heal.
- I** *Ice*, 10 minutes of ice packs every 2 hours beginning immediately after the injury and continuing for 24 - 48 hours.
- C** *Compression*, a moderately firm bandage will help to control the swelling.
- E** *Elevation* of the injured part, above heart level will help to reduce swelling
- D** *Diagnosis*, if pain and discomfort persist, see your physiotherapist immediately for diagnosis and ongoing treatment.

DO NOT heat or massage the damaged area. Drinking alcohol and further running or exercise of the injured part will increase the bleeding and swelling and make the injury more severe. A severe injury will take more time to heal than a mild injury.

How Physiotherapy Can Help

Physiotherapists are highly qualified and trained in the assessment and treatment of sports injuries. Treatment techniques employed include the use of various electro-therapeutic agents such as interferential, ultrasound, laser, ice and heat. Other techniques commonly used include joint mobilisation and manipulation techniques to increase the length and strength of muscles and prescription of exercises to enhance balance and co-ordination.

- Remember prevention is always better than cure. Some points to consider that may assist in preventing sports injuries occurring are:-
- Always ensure adequate warm up and warm down exercises, including aerobic activity. Stretching all the major muscles groups and practice of skills associated with the sport should be incorporated.
- Ensure you are fit enough to play at the level you are competing in.
- Ensure you have an adequate knowledge of the sport to be played.
- Treat any minor injury immediately. Do not let it develop into something more serious.

Your ***PHYSIOTHERAPIST*** can help you with accurate and practical advice on all aspects of sports injuries, prevention and treatment.