Back pain management programme

The immediate treatment of soft tissue injuries

The immediate response of soft tissue, such as muscle and ligaments, to an acute injury is inflammation. This involves bleeding, swelling and pain. If inflammation is allowed to proceed to excess, blood and swelling will be left in the damaged tissue, which delays the natural healing process. This ultimately delays the return to full sporting activities.

The aim of management of an acute injury is, therefore, to limit bleeding, restrict swelling and reduce pain. If you suspect a serious injury, however, consult your doctor immediately. If you suspect a bone fracture, you must get an x-ray.

The following guidelines should be followed:

P Protection
R Rest
I Ice
C Compression
E Elevation

Protection: It is necessary to protect the injured structure from further injury. The amount of protection required will depend on the extent of the injury and may involve the use of a sling, taping or elbow crutches.

Rest: Rest is necessary to prevent aggravating the inflammation and delaying the healing process. Rest does not mean stopping all activity. Moving a joint as pain allows will help prevent joint stiffness. Also, after 48 hours, cardio-vascular activities may be resumed as long as they do not over stress the injured part. For example, you could try swimming or cycling but do not do breast stroke if you have a knee injury.

Ice: Ice helps to reduce blood flow to the injured area and, therefore, helps to limit swelling and to reduce pain. Place some crushed ice or a bag of frozen peas in a damp towel and wrap around the injured part. **Do not** put the ice pack all around the joint as this will compromise the circulation to the area. It should be applied for 15-20 minutes every couple of hours. This should be continued for at least three days after injury.

Do not apply ice if you have circulation problems.
Do not apply ice if you cannot distinguish between hot and cold.
Do not apply ice directly to the skin as this may cause ice burn.

Compression: This helps to decrease the amount of swelling and bleeding into the injured area. This can be applied using, for example, tubigrip or a stretch bandage but should never feel too tight. Remove the tubigrip if you are elevating the limb at night.

Elevation: Elevating an injured limb will help to reduce swelling. When elevating the arm, the hand and elbow should be higher than the shoulder and when elevating the leg, the foot and knee should be higher than the hip. Flexing your foot up and down with your foot on a foot stool will help to reduce the swelling even further. Remember to remove any compression bandages before elevating your leg.

Things not to do after an injury:

- **Do not** continue to exercise the injured area.
- **Do not** soak in a hot bath.
- **Do not** apply heat to the injured area as this will increase circulation to the area, increasing blood flow and, therefore, increasing bleeding and swelling.
- **Do not** let the affected area be massaged. Again, this will only increase bleeding and in the first four to six days may damage newly forming muscle or ligament fibres.
- **Do not** stretch an injured muscle for the first 48 hours as you will put too much strain on muscle fibres which are trying to heal. However, after this time, gentle passive stretches are essential to prevent shortening and loss of elasticity in the muscle. The stretches you are given should never be painful and you should never bounce at the end of a stretch. Each one should be held up to a count of 30 seconds and repeated at least five times, five times a day. They should be continued until the stretch is totally pain free and equal to the uninjured side in flexibility. When you return to your sport you should always stretch all major muscle groups **before** and **after** any exercise. If the pain and swelling do not begin to reduce after 48 hours, you should consult your doctor.