

Health Facts

Emergency Department

Soft tissue injuries (sprains and strains)

What is a sprain or strain?

Soft tissue injuries include injuries to muscles, tendons and ligaments (not bone). Tendons are fibrous bands that hold muscles to bone. Damage to muscles or tendons by overstressing is referred to as a 'strain'. Ligaments are fibrous bands that hold bones together. Overstretching ligaments is referred to as a 'sprain'.

Sprains and strains can happen to people of all ages with varied results. When soft tissues are damaged, there is usually pain, swelling and often bruising.

A lot of swelling can slow the healing process. You can expect full recovery from most soft tissue injuries in one to six weeks. The length of time depends on your age, general health and the severity of your injury.

Treatment for soft tissue injuries

The initial treatment for soft tissue injuries is based on the principles of 'RICE'. This is most important in the 48-72 hours following the injury and can speed up recovery.

Rest

Rest is important to protect the injured muscle, tendon, ligament or other tissue from further injury and to allow the healing process to begin. You may need crutches or a sling.

Ice

Apply ice bags, cold packs, or even a bag of frozen peas, wrapped in a thin towel to the injured area. This can provide short term pain relief and limit swelling by reducing blood flow to the injured area. Never apply ice straight onto the skin, as it can cause damage to underlying tissue. Apply the ice pack for 15 to 20 minutes then remove it for at least 20 minutes before reapplying. Repeat every 1-2 hours when awake if pain and swelling persist.

Compression

Apply a firm bandage that does not restrict circulation or cause additional pain. The bandage should be applied above and extend below the affected joint ensuring the whole joint is covered. An elasticised compression bandage (tubigrip) may be used for this purpose instead of a bandage. Compression helps to limit swelling and improve healing.

Elevation

Elevating an injury helps to reduce swelling. Raise the limb above the level of the heart, if possible. Support the limb with pillows or a sling to keep it raised when not walking or using it.

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In the first 48-72 hours, it is important to avoid:

Heat

Increases blood flow and swelling

Re-injury

Protect the joint until it has healed properly. In most cases, the tissue needs complete repair before return to sports.

Massage

Promotes blood flow and swelling. Massage can increase damage if begun too early.

Pain

Give paracetamol, paracetamol/codeine preparations (eg Painstop® day-time) or ibuprofen for pain if required as per the manufacturer instructions.

See your local GP if there is no improvement in your injury after a week or if you have any concerns.

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