City Hospitals Sunderland MHS

NHS Foundation Trust

ACUTE ANKLE SPRAIN

PATIENT INFORMATION LEAFLET

What is a sprain?

A sprain is an injury to a ligament. Ligaments are strong tissues around joints which connect bones to other bones and provide support to the joints.

A ligament can be stretched during a sudden pull. This may partly tear some of the fibres in the ligament. Occasionally, a ligament may fully tear (rupture).

A damaged ligament causes inflammation, swelling, and bleeding (bruising) around the affected joint. Movement of the joint is painful.

The aims of treatment are to keep inflammation, swelling and pain to a minimum and to be able to use the joint normally again as quickly as possible.

Treatment of a sprain for the first 48 hours

Think of RICE - Rest, Ice, Compression, Elevation

- Rest the affected joint for 48 hours after injury.
- Ice should be applied as soon as possible after injury for 10-30 minutes. Less than 10 minutes has little effect. More than 30 minutes may damage the skin. Make an ice pack by wrapping ice cubes in a plastic bag. (Do not put ice directly next to skin as it may 'ice-burn'.) A bag of frozen peas is an alternative. Gently press the ice pack onto the injured part. The cold from the ice is thought to reduce blood flow to the damaged ligament. This may limit pain and inflammation.
- Compression with a bandage may limit swelling and help to rest a joint. A tubular compression bandage is used for most joints. Mild pressure that is not uncomfortable and does not stop blood flow is ideal.
- Elevation will limit and reduce any swelling. For ankle and knee sprains, keep the foot up on a chair to at least hip level when you are sitting. (It may be easier to sit or lie back on a sofa and to put your foot on some cushions.) When you are in bed, raise the foot of the mattress by placing pillows between the mattress and the bed.

Treatment of a sprain 48 hours after injury and beyond

Movement should replace rest. For most minor sprains this will simply mean starting to use it more freely. Don't do anything that causes too much pain but gently get the joint moving again. The aim is to make sure the joint moves around in all directions and does not become stiff.

- Circle your foot in a clockwise direction.
- Circle your foot in an anticlockwise direction.
- Pull your toes up towards your shin.
- Push your foot downwards, as though you were pressing down the accelerator pedal in a car.

Do each of these exercises 10 times. Repeat this set of exercises two or three times a day. Some people prefer to imagine writing the letters of the alphabet with your big toe. Complete the alphabet from A-Z. In doing this several times a day you will have exercised your ankle in the same way. Wear flat, sensible shoes for the first couple of weeks. Avoid sport or vigorous exercise for 3-4 weeks after an injury.

Compression bandages should not normally be used after 48 hours. They limit the movement of the joint which you should now be moving more freely.

Heat and massage may be soothing, but you should not use heat within the first 48 hours after injury when inflammation is developing. They have the opposite effect on the blood flow than ice as they encourage blood flow. This helps the healing process. You can apply heat by using a hot water bottle, soaking in a warm bath or using a hot flannel or cloth.

Physiotherapy may help for more severe sprains or if symptoms are not settling. A Physiotherapist may advise on exercises and give heat, ultrasound or other treatments.

Medication for sprains

No medication may be needed if the sprain is mild. Painkillers such as **Paracetamol** are useful to ease pain. It is best to take Paracetamol regularly, for a few days or so, rather than every now and then. An adult dose is two 500 mg tablets, four times a day with a maximum dose of 8 tablets within a 24-hour period. Do not take any other product containing Paracetamol. A doctor may prescribe additional painkillers if the pain is more severe.

Anti-inflammatory painkillers can be used in addition if pain is severe. These relieve pain and may also limit inflammation and swelling. You can buy Ibuprofen at Pharmacies without a prescription. Others are available only on prescription. Side effects sometimes occur with Anti-inflammatory painkillers. Stomach pain and bleeding from the stomach, are the most serious. Some people with asthma, high blood pressure, kidney failure or heart failure may not be able to take Anti-inflammatory painkillers. If you are pregnant or trying to get pregnant you shouldn't use them. A Pharmacist will be able to offer advice.

When to return to the Emergency Department

- If the pain is severe or worsens despite pain killers and the 'RICE' treatment.
- If symptoms and swelling do not gradually settle. Most sprains improve within 10 days. However, the pain may take several weeks or months to go completely, especially when you use the injured joint.

Preventing sprains

Always warm up before doing vigorous exercise. Ankle sprains are, by far, the most common sprain. Use good supporting footwear for sport. Do not do occasional bouts of vigorous exercise. Instead, aim for a general and steady build-up to fitness.

Useful websites

www.nhs.uk www.chsft.nhs.uk

Contact details

This information was correct at the time of printing. While the Trust makes every reasonable effort to keep its information leaflets up to date, very recent changes may not yet be reflected in the guidance and you should discuss this with the clinical staff at the time of your appointment.

Information is based on that available on www.patient.co.uk.

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Emergency Department