

Emergency Department Sprains and Strains

General Information

Sprains and strains occur when muscles or ligaments are stretched or torn. It may take several weeks for your injury to heal. The R.I.C.E. treatment can help speed your recovery.

R.I.C.E. stands for rest, ice, compression, and elevation. Applied quickly after an injury, these four first aid methods can make the difference between a fast recovery and a prolonged layoff. Treatment should begin as soon as possible. For pain, your doctor may also recommend a medication.

Instructions

- **Rest:** Trying to "work an injury out" instead of resting it prolongs recovery time. Tapes, wraps, slings, or splints may be helpful to protect an injured limb and help healing without complication. Avoid active use of the injured limb for at least 72 hours (use crutches or reduce bearing weight on an injured leg).
- **Ice:** Apply ice to the injured site for 10 minutes every three hours, for three days. If you are not able to keep this schedule, ice the injury at least four times a day for 10 minutes each time. More often is better but avoid longer than 10 to 15 minutes at a time because the opposite effect may happen.
- **Compression:** Apply pressure to the injured site limits swelling and reduces bleeding in the area. Wrap the injury with an elastic bandage starting from the point farthest away from the heart. The wrapped bandage should feel snug and comfortable but not cut off circulation. If toes or fingers start to feel numb, or turn blue or white, the tensor is too tight. Readjust the pressure in the bandage.
- **Elevation:** While you are icing the injury, keep the injured site elevated to the level of the heart, if possible. Even moderate elevation helps control swelling or tissue congestion. Use a chair, a pillow, or any other support to keep the injured site elevated during your recovery period.

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How to Apply Ice

You will need:

- An elastic "tensor" bandage or a towel
- Something to "ice" the injury (frozen peas, crushed ice or ice cubes)

After laying down the first layer of the elastic bandage, apply "ice" and continue wrapping the bandage over the "ice" to hold it in place. The first layer of bandage helps transmit cold while protecting the skin against frostbite.

Alternatively, put "ice" directly in a towel and apply the towel to the skin. Plastic bags are not recommended because they may cause frostbite if applied to bare skin.

Resuming Exercise

Unused muscles, tendons or ligaments become shorter and weaker following an injury. This makes it easier to re-injure once activity is resumed. A good at-home stretch and strengthen program will improve flexibility and the strength of the injured site. Range-of-motion exercise should begin as early as 72 hours after the injury. The frequency and intensity of these exercises should increase gradually.

If the injury has been severe, your doctor may refer you to a physiotherapist to help you get your strength back as quickly as possible. The physiotherapist will plan stretch and strengthening exercises specific to your injury.

See your Family Doctor if:

- The injury is not improving within 7 to 10 days

Return to Emergency if any of the following develop:

- You have signs of impaired circulation such as:
 - a) an increase in pain in the limb
 - b) toes or fingers becoming swollen; white or blue; numb or cold

If any imaging was done while you were in the Emergency Department it will be reviewed by a doctor in the hospital and initial results shared with you before you leave. A doctor specializing in reading images (a Radiologist) will review those same images within a few days of your visit and will send a final written report to the doctor who ordered them and to your family doctor to share with you.

For more information or questions contact HealthLinkBC at 811.

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