



Healthshare MSK Service

ICE AND HEAT TREATMENTS FOR INJURIES

ICE

With any sprain, strain or bruise there is some bleeding into the underlying tissues. This may cause swelling and pain and can delay the healing process. Ice treatment may be used in both the immediate treatment of injuries and in later rehabilitation.

During immediate treatment, the aim is to limit the body's response to the injury.

Ice will:

- Reduce bleeding into the tissues.
- Prevent or reduce swelling and inflammation.
- Reduce muscle pain and spasm.
- Reduce pain by numbing the area and by limiting the effects of the swelling.

These effects all help to prevent the area from becoming stiff by reducing excess tissue fluid that gathers as a result of an injury.

In the later phase of recovery the aim changes to restoring normal function. At this stage the effects of ice can enhance other treatments, such as exercise, by reducing pain and muscle spasm. This then allows better movement. If you are doing exercises as part of your treatment, it can be useful to apply an ice pack before exercise. This is so that after the ice pack is removed the area will still be a little numb. The exercises can also be done with the ice pack in place. This reduces pain and makes movement around the injury more comfortable.

How do you make ice packs?

Ice packs can be made from ice cubes in a plastic bag or wet tea towel. A packet of frozen peas is also ideal. These mould nicely and can go in and out of the freezer. However, frozen vegetables should not be eaten if they have been thawed and re-frozen. Purpose-made cold packs can also be bought from pharmacies. Take care when using ice and cold packs directly from a deep freeze, as they can cause ice burns quickly if used without care and proper protection.



How are ice packs used?

- Place a cold wet flannel/towel over the inflamed area.
- Place the ice pack over the flannel/towel.
- Ice can be left on for 20 to 30 minutes but there is little benefit to be gained by leaving it on for longer. You run the risk of damaging the skin if ice is left on the skin for more than 20 to 30 minutes at a time. The skin should be checked at regular intervals.
- The effect of the ice pack is thought to be improved if it is pressed gently on to the injured area.

Please repeat the icing process daily or as advised by your physiotherapist.

Note: ice can burn or cause frostbite if the skin is not protected with a wet flannel/towel.



HEAT

When an injury is older than 48 hours, heat can be applied in the form of a wheat bag, heat pad, deep heat cream or hot water bottle. Heat causes the blood vessels to open wide (dilate). This brings more blood into the area to stimulate healing of damaged tissues. It has a direct soothing effect and helps to relieve pain and spasm. It can also ease stiffness by making the tissues suppler.

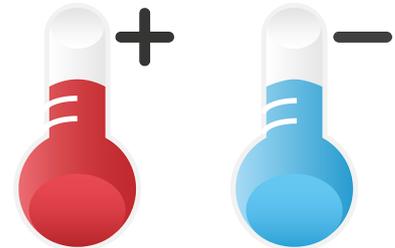
If heat is applied to the skin it should be warm not hot. If excessive heat is applied there is the risk of burns and scalds. A towel can be placed between the heat source and the skin for protection. The skin must be checked at regular intervals. Leave the heat pad on for 20 minutes and reapply after an hour if needed.

Do not use heat on a new injury. This will increase bleeding around the injured area and may make the problem worse. The exception to this is new-onset low back/neck strains. A lot of the pain in this case is caused by muscle spasm rather than tissue damage, so heat is often more helpful than ice.

Precautions when using heat and ice

Do not use cold packs or heat:

- Over areas of skin that are in poor condition.
- Over areas of skin with poor sensation to heat or cold.
- Over areas of the body with known poor circulation.
- In the presence of infection.
- On the left shoulder if you have a heart condition.
- Around the front or side of the neck.



This leaflet has been written to help you understand more about the problem with your injury. This leaflet is not a substitute for professional medical advice and should be used in conjunction with verbal information and treatment given.