



Injury Tips

Inflammation: Tissue Response to Injury

The acute phase of inflammation is the initial reaction of body tissue to an irritant or injury and is characteristic of the first three or four days after injury. Inflammation is your body's way of protecting itself, localizing the injury, and ridding the body of some injurious agent in preparation for healing and repair. Inflammation is the body's natural defense, but too much inflammation slows healing because it cannot progress to the next phase. Major outward signs of inflammation are:

- Redness
- Heat
- Swelling
- Pain
- Loss of function

First Aid: Medical Response to Injury

One purpose of first aid is to prevent further injury. It is important not to self-diagnose but rather to seek medical assistance. The key components of first aid are

RICE Rest, Ice, Compression, Elevation

Rest: The body needs time to heal. The amount of rest depends of the severity of injury as indicated by pain, swelling, decreased ROM or decreased strength.

Ice: Ice can decrease swelling, pain, muscle, spasm, and metabolism. Put an ice pack on an injury immediately following the injury for 10-15 minutes, and then repeat every hour. The skin should be protected with a moist towel. Use ice for the first 72-96 hours after the injury and routinely for chronic conditions.

Compression: Compression assists the body's healing process by reducing circulation to the area during the acute injury stage. Compression includes ace bandages or sleeves. If it is too tight, it could impair circulation and not allow proper removal of waste products from the injury site.

Elevation: Elevate the inflamed body part above the heart for the injury to heal most effectively. Elevation assists the body in removing waste buildup/swelling from the site of the injury.

Ice vs. Heat

ICE

Ice should be applied to an injured area immediately after injury and periodically over the next 2-3 days. If swelling and inflammation are occurring during this time, ice will help decrease the swelling and pain.

Examples: Ice bag, ice cup, ice slush

Ice bag – Fill a plastic bag with ice. Leave enough room in the bag to allow the bag to conform around the injured area.

Length of application: 15 min

Period between applications: 2 hrs

Elevate the injured area above the heart to assist in decreasing swelling.

Ice cup – Fill a paper or Styrofoam cup with water. Freeze, and when solid, peel away to apply to the injured area.

This method works best on smooth surfaces.

Length of application: 5-7 min

Period between applications: 1-2 hrs

Rub the ice cup continuously over the injured area.

Ice slush – Fill a bucket with half ice and half water. This method is best used for extremities.

Length of application: 5-7 min

Period between applications: 2 hrs

Put the injured body part in the bucket. This method is painful for the first 2-4 min.

HEAT

Heat should be applied to an injured area only after swelling has stopped. This takes approximately 2-3 days after injury. Heat should be applied in the form of moist heat.

Examples: Moist heating pad, warm moist towels, warm bath

Moist heating pad – Check the instructions with the heating pad to make sure it is or can be used as a moist heating pad.

Length of application: 20 min

Period between applications: 2 hrs

Allow the heating pad to lie on the injured area. Do not lie on a moist heating pad.

Follow the manufacturer's instructions!

Warm moist towels – Run towels in warm water. Ring them out and apply to injured area.

Length of application: 10-15min

Period between applications: 2 hrs

Warm bath – Draw a warm bath in a tub or bucket. Check water temperature before getting in.

Length of application: 15min

Period between applications: 2 hrs