

Acute Injury Care

Acute Injuries occur suddenly during activities. Examples of Acute Injuries include sprained ankle, strained back, or muscle pulls. When you have an acute injury there are things you can do to minimize tissue damage, protect from further injury and promote a faster recovery.

P.R.I.C.E

Most important in the first 24-72 hours post injury.

Swelling can cause further damage the longer it is in and around the joint and tissue, and it needs to be controlled. Swelling can be managed by using PRICE, which stands for Protect, Rest, Ice, Compression and Elevation.

PROTECT

Protect the injured area as needed with a brace, splint, crutches, or tape to reduce stress on the injured area to ensure further damage does not occur.



REST

Resting an injury reduces pain and swelling, but knowing how long to rest is the key. Minor problems can quickly worsen if a joint or limb is used too soon because further injury is caused. For the initial 24-48 hours after an injury you will want to rest, but after that modified activities can be started. Pain should be used to gauge the amount of activity you do following an injury. If you experience pain while doing activities, then you are aggravating the condition and should stop and rest. Generally, you should avoid strenuous activities or those that cause pain.

ICE

Ice is used to decrease pain and reduce swelling. Best results are achieved if crushed ice, either in a plastic bag or a towel, is applied directly to the injured area. When using frozen gel packs, a damp towel should be placed on the skin prior to application. While they are reusable and economical they can reach a much lower temperature than ice and can cause frostbite if applied directly to the skin. Instant, crushable cold packs are convenient, but can become expensive, and often do not stay cold long enough to be effective.



You will find that a bag of frozen peas is the best ice pack around. A wet cloth between the ice and your skin is advisable. Cold water soaks are excellent for ankles and wrists/hands (tap run cold water is usually cold enough, but a tray of ice cubes may need to be added in the summer).

A good rule for acute injury management with ice is **20 minutes on**, then approximately **40 minutes off**, or until the skin temperature returns to normal temperature. Some other icing protocols will be 15 minutes ice with 30 minutes off.

Smaller body parts (i.e. finger and more superficial injuries) require a shorter time for ice treatment. For example, the recommended ice time for a sprained finger may be 10 minutes but an injury to your upper thigh could be 20 minutes. If the skin area you are icing becomes too pink the ice may have been on too long. These applications can be frequent for the first 24-72 hours after injury. Ice application is particularly effective if applied in combination with compression and elevation.

AGGRESSIVE ICING

The first night after an injury can reduce your recovery time **significantly** by minimizing swelling. Professional athletes will often ice all through the first night with hourly 15-20 minute icings. The first night of icing can be your best chance at a quick recovery and can be the most important part of the recovery process. If appropriate, you may want to aggressively ice your injury as well. Contact your Sherwood Park Sports Physiotherapy therapist for proper care of your acute injury.

COMPRESSION

Wrapping an injured joint with a tensor bandage compresses the tissue which helps to decrease swelling. If your fingers or toes turn blue or become numb, the wrap is too tight, and should be loosened and reapplied. Always apply a tensor wrap starting at the lower part of your limb and wrap in a direction that works towards your trunk; i.e. to wrap your knee you would start below your knee and wrap towards your hip. This directional wrapping encourages swelling to leave the area via the lymphatic system. Compression wraps should be applied as soon as possible after an injury, and should be rewrapped every 2-3 hours. Ice can be applied while the compression wrap is on. Sleeping with a compression wrap is not advised as numbness or lack of blood flow could occur without notice leading to damage of the tissues.





ELEVATION

Lying or resting with the injured joint propped higher than your heart will also reduce swelling. This enables gravity to help with the lymphatic drainage (decrease in swelling).

MEDICATION

Medications are risky with acute injuries. Typically recommended are painkillers like Tylenol but not NSAIDs like Aspirin, Ibuprofen, Advil, or Aleve as they can affect blood clotting and may allow for an increase in bleeding or swelling in the initial 24-72 hours.

SLEEP & RECOVERY

Growth hormone, which is critical for injury recovery, is released during stage 3 of sleep. Getting the proper amount of sleep is important for injury recovery. Stage 3 of sleep generally occurs between hours 4-6. Be aware of this following the first night of icing.