

Self Help Measures after a minor musculoskeletal injury

In this article, we summarise the principles of P.R.I.C.E as an initial self help measure particularly in the initial 24 to 72 hours following a minor musculoskeletal injury and explore some additional self help measures which may help.

P.R.I.C.E stands for “Protection, Rest, Ice, Compression and Elevation”,

P: Protection is needed to prevent further injury. For example, if you have injured a leg or foot you may protect this by limiting or avoiding weight-bearing through this limb through the use of crutches, a cane, or hiking poles. If you have injured your arm, partially immobilizing the injured area by using a sling, splint, or brace may also be a means of protection.

R: Rest is important to allow for healing. In the context of musculoskeletal problems, we often use the term “relative rest”. This means sufficient rest to allow for healing which is not so excessive/restrictive that recovery is compromised or slowed. In general, this means avoiding activities that could stress the injured area to the point of pain or that may slow or prevent healing.

I: Ice refers to the application of cold treatments. Ice is recommended to minimise and reduce swelling as well as to decrease pain. If you have an ice pack you can use this, but a bag of frozen peas can also be used as a makeshift ice-pack. Never put ice in direct contact with the skin though. Frost burns. Instead, place a thin cloth or piece of paper towel between the ice pack and the skin and limit the cold exposure to 10 to 15 minutes. You can repeat the application of the ice pack every 1-2 hours as required.

Skin sensitivity or allergy to cold exposure can occur. If this happens, the skin may appear mottled, red and raised where the ice contacted the skin. If this is experienced, discontinue the ice treatments. Redness alone, however, is a common temporary side effect of ice application and is nothing to be concerned about. It should resolve after a few minutes of re-warming.

C: Compression is the use of a compression wrap, such as an elastic bandage, to apply some gentle pressure to the injured tissue. Compression minimises swelling and provides mild support. To apply elastic bandage start a few inches below the injury and wrap in a figure eight or spiraling manner to a few inches above the injured area. A medium amount of tension should be used to provide ample, but not too constrictive compression. If the bandage causes numbness, tingling, or color change of the soft tissue it should be loosened immediately. It is usually best to remove or significantly loosen the elastic bandage for sleeping and to re-apply it the next morning.

E: Elevation can also help to reduce swelling in an injured extremity or joint. Elevation is achieved by positioning the injured area above the level of the heart. Elevation can be used during your waking hours and within the first 24-48 hours

you may wish to elevate the injured area in bed too (for example you can position an injured limb on extra pillows) If there is significant swelling which continues after 24 to 48 hours, or if swelling recurs during recovery, then continued periodic elevation is appropriate

The reason that many of the P.R.I.C.E principles focus on minimising swelling is that swelling can increase pain and reduce range of motion in the injured area. Excessive swelling may also impair the healing process.

Additional treatments:

As well as the steps outlined above additional treatments can help to relieve symptoms.

- Patients in need of pain relief can use over-the-counter creams, patches or tablets such as paracetamol, or non-steroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen provided that there is no reason why you should not use such pain relief. If you are taking other medication, or have other medical conditions, you should check with your pharmacist first.
- Sometimes, some gentle range-of-motion exercises for the affected joints and soft tissues or exercises involving isometric muscle contractions can improve and maintain strength and function. A medical professional such as a physiotherapist or osteopath may be able to suggest treatments specific to particular person or injury.