

Daniel Fulham O'Neill, M.D., Ed.D, F.A.A.O.S.
Board Certified Orthopaedic Surgeon & Sports Psychologist

*PO Box N, Holderness, NH 03245
Tel: 603 536 2270 Fax: 603 536 2277*

ICE OR HEAT - 20 MINUTES

It doesn't really matter how you hurt yourself, or whether or not you are a candidate for surgery, the way we initially treat your knee the same - with R.I.C.E. This is an acronym that stands for Rest, Ice, Compression, and Elevation. Easy to remember, it helps you nurse your injured or sore knee in the days after your injury as well as before and after your operation. Here is a description of RICE that you can continue to use throughout the course of your injury and rehabilitation.

REST

The most obvious way to give your knee some rest is to lie down, but most of us don't have the luxury or desire to spend several days on the couch. Another option is to slow down your activity until things have a chance to calm down. The biggest mistake people make is when things start feeling good, they immediately go back to the level that fired up their knee's in the first place. After a knee upset, institute a "return to" program where you get back to normal activities over the course of weeks, not days. Also, there is no rule that says you can only use crutches for a broken leg. One or two days of crutches might be all the rest your knee needs to calm down.

ICE

A big slushy bag of ice that wraps around the knee is terrific for swelling. Options for ice include:

- A freezer-size plastic bag of crushed ice, ice cubes, or even snow.
- A large bag of frozen peas from the local grocery store.
- Make your own by pouring 3 cups of water and 1 cup of rubbing alcohol together into a 2-quart (or larger) freezer bag. Mix well and remove excess air before putting into the freezer. This freezes to a nice slush that conforms easily to the body and can be reused.

Put the ice on for 20 minutes at a time with some thin material (like a pillowcase) between the ice bag and your knee so you don't freeze your skin. Stay elevated while you are doing the icing.

COMPRESSION

Applying pressure can be a dangerous act unless you are experienced or know somebody who understands how to properly wrap the knee. Compression should be used throughout the day, but removed when sleeping. The safest way to add compression by yourself is to use a long stocking so you are compressing from the toes all the way up to the groin. Such stockings (sometimes called T.E.D.S.) can be found in most pharmacies. A good set of tights might also do the trick. Avoid wrapping an Ace bandage around just the knee as you can cause a lot of swelling down below the wrap. If you do use an Ace bandage, use two bandages and start from the toes.

ELEVATION

Elevating your leg means raising the involved extremity above the heart. Swelling is the enemy of tissues, and we need to make every effort to decrease it. This can be accomplished by lying on the floor and propping your leg on a chair or by lying on the couch with pillows supporting your leg above your heart.

Anti-inflammatory medicine, such as aspirin, ibuprofen (Advil, Motrin), and Aleve, can also help with swelling and the resulting pain. Tablets are certainly not a substitute for **R.I.C.E.**, but work well when used together.

An additional element to this regimen that is extremely important, but under used is **MASSAGE**. Get the injured area in a relaxed position and start massaging toward your heart. Go slowly over the swollen area to try and loosen the involved tissue. Obviously, shoulders and backs need a willing assistant for massage, but you can do your legs/knees by yourself.

Many times patients ask about the use of heat. Heat is especially good for sore muscles, but not usually for ligaments or tendons. The only time we commonly use heat is with so-called “**contrast baths**”.

- Five minutes of cold (ice pack or cold towel).
- Five minutes of moist heat (hot, wet towel) w/ a good stretch.
- Five minutes of cold again.

Use this protocol and return back to your sport/exercise schedule slowly. Increase activities weekly, not daily. If pain and swelling persist, consult your physician