

Athletic News

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Ice or Heat: What to Use On Sports Injuries

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“Should I apply ice or heat to my injury?” This is a question asked in my clinic almost daily. Essentially, there are two classes of injuries, acute and chronic. An acute injury denotes a recent and intense trauma, while a chronic injury relates to a previous and frequently reoccurring less extreme injury. The basic rule of thumb for care is ice for an acute injury, and heat for a chronic one.

I know, I know, applying a heating pad or enjoying a hot bath sounds so good after you have sprained, strained, twisted, or wrenched some part of your body. However, there is just one catch: The warmth of heating pads or hot baths can actually prolong the pain and extend your recuperation. The swelling and much of the inflammation that follows an injury is largely due to the leakage of blood from ruptured capillaries. Heating tissues causes the capillaries to widen or dilate. This dilation can cause an increase in the leakage of blood from the capillaries and add to your swelling and pain. It is important to note that the blood that diffuses into the tissues will later lead to increased inflammation ultimately slowing the healing process. Cold, on the other hand, causes blood vessels to constrict. This con-

striction prevents further leakage of blood minimizing swelling and pain.

With acute injuries such as sprains, strains, contusions, and abrasions, the application of ice is probably the fastest, safest, and most effective therapy available. In fact, the optimal management of an acute injury can easily be remembered using the acronym, **RICE**:

Rest (minimize movement of the injured body part)

Ice (apply a cold pack)

Compression (light pressure wrap to the affected body part can help minimize swelling)

Elevation (raise the body part above your heart so that the pressure from the blood and swelling in the affected area is reduced as the fluids drain from the area by gravity)

The cold pack is the most common form used for administering ice on the knees and back. It should be applied with a thin towel between it and the skin to prevent frostbite. Treatment should have a maximum duration of 20-25 minutes. This is recommended to be done every 1-2 waking hours for the first 48-72 hours after an injury. The best form of treatment for bony areas such as the ankle or elbow is with ice massage. Freeze water in a Styrofoam or Dixie cup, then peel the top away to leave enough of the cup bottom to hold onto. Using small circular motions, apply the ice directly to the injured area for twelve to fifteen minutes or until all of the ice is melted. This allows the injury to get

the cold treatment needed for the early healing process while massaging and breaking up scar tissue that may be building up from the injury.

Remember, when an area of the body is injured, it may take ten to fifteen minutes before you notice any swelling or it may appear instantly. The wisest thing to do when you “twist” or “pull” a muscle or injure a joint is to ice it immediately, and then if possible get it wrapped or taped up. “Walking it off” can lead to greater pain and swelling in a matter of only ten to fifteen minutes and increased recovery time. So be intelligent and do not hesitate to grab the bag of ice as soon as an injury occurs.

I hope this clears up any confusion about when to use ice or heat when treating an injury. Points to remember:

- If the chief problem is pain and swelling use ice
- If the key problem is stiffness use heat
- If it is a fresh injury, use ice
- If it is an old injury consider heat
- If in doubt, use ice
- Whether you use ice or heat, 25 minutes is the maximum unless in a clinical setting.

If you have any questions please contact your 319 MDG Primary Care Manager, or the Physical Therapy Clinic at 747-5555