

# TREATMENT OF ACUTE INJURIES

by: DR. TREVOR L. HALL, MD, CCFP, DIP. SPORT MED

The successful treatment of athletic injuries depends on many factors. One such factor includes the “acuteness” of the injury and how quickly an injury is treated. “Acute” injuries are those that have occurred recently, usually defined as having occurred in the previous 48-72 hours. Examples of acute injuries include tendon strains, ligament sprains, muscle strains, muscle contusions (“charley horse”- Figure 1) and bone fractures. Most acute injuries heal better when treated **early** (within the first few days of being injured).

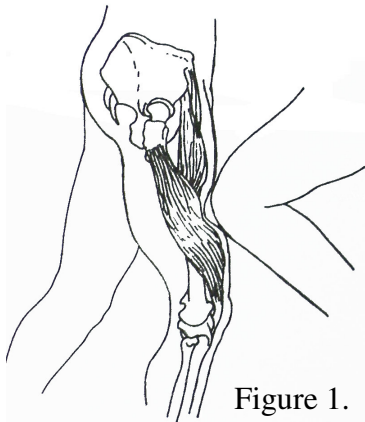


Figure 1.

Ankle sprains usually rehabilitate faster with early intervention. An ankle sprain that is treated early (within the first 24 to 48 hours) usually heals faster than if there is a delay in treatment. Ankle sprain treatment consists of icing, compression, anti-inflammatory medication, physiotherapy and athletic therapy. These measures help to control swelling and pain, regain range of motion, and preserve strength and balance sense. This early treatment usually results in faster healing and earlier return to sport or activity. A moderately severe ankle sprain that has not been

treated early often develops a “boggy” swelling that is a lot more difficult to resolve. Prolonged ankle swelling leads to more pain and slower return of range of motion and function (or participation in pre-injury sport or recreational pursuits).

Another example involves deep thigh muscle contusions (“charley horse”). These injuries can often lead to severe stiffness in the quadriceps muscle if not treated with compression and appropriate range of motion exercises in the early stages. In addition, some acute injuries require early intervention that cannot wait. An example would be an Achilles tendon rupture (“torn Achilles”) or certain finger tendon ruptures, both of which may require surgical repair within a week or so after the injury.

In general, any acute injury should be treated with the “RICE” principles (Rest, Ice, Compression, Elevation). Rest in sports medicine may range from doing a different non-painful activity to using crutches depending upon the severity and type of injury. Icing is very important with acute injuries as ice helps to decrease swelling and inflammation. NEVER use heat for an acute injury (heat will increase inflammation and swelling). Ice should be applied for approximately 15 minutes at a time, every hour during the day if possible, with a towel or layer between the ice and skin to help prevent frostbite. Compression helps to control swelling and can

usually be accomplished with a tensor bandage (very important for ankle sprains and muscle contusions). Elevation helps to control swelling of the affected area.

Deciding whether or not an injury requires medical attention may be difficult. Some signs to look for that should prompt a visit to a physician include: rapid swelling, moderate or severe amount of swelling, inability to walk (if injury is to lower extremity), inability to move the joint in a full range of motion (e.g., not able to move shoulder around in a full circle, not able to fully bend or straighten a knee), extreme pain or pain at rest, and deformity of a limb. Even without any of these features, if an injury does not improve significantly after a couple of days of rest, or if an athlete is just very confused about what should be done, he or she should seek the advice of a physician who knows how to assess and treat sports injuries.

Early assessment and treatment of acute injuries is essential for fast healing and early and safe return to sport and activity.

*Dr. Trevor L. Hall, MD, CCFP, Dip. Sport Med., is a sports medicine physician, certified by the Canadian Academy of SportMedicine and*



*fellowship-trained at the University of Toronto. He is an assistant clinical professor at the McMaster University Medical School and a guest lecturer at the University of Waterloo. He has worked internationally with Canadian national teams and currently is sports medicine consultant for WLU Football Team.*