

Skiing Injuries and the Power of TCM

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The Opening Ceremony of the XXI [Vancouver Olympic Winter Games](#) is Feb. 12. For these athletes, it is an honor to be a member of their national team. They are all winners, regardless of placing. For some, TCM helps them on their path to winning a medal. Skiing is but one example of how TCM can keep all winter athletes, regardless of whether or not they are at the Olympic level, in medal-winning shape. Olympic dreams, and those of the recreational skier, have been made and lost due to untimely injuries on the slopes.

Without question, [skiing is a very popular winter sport](#). According to the National Ski Areas Association 2007-2008 annual report, there were 60 million visits to ski resorts, up from 55 million the previous year. Of course, along with all that schussing down the slopes comes the possibility of injuries, as those acupuncturists working in winter climes already know. In fact, one of the most [common injuries](#) is a tear to the anterior cruciate ligament (ACL).

ACL injuries are caused by traumatic force applied to the knee with a twisting motion, causing forceful hyperextension. Skiers are susceptible to ACL sprains due to landing jumps or during twisting falls, as well as being hit from the anterior or lateral aspect of the body with contact force. The skier typically hears an audible "pop" upon impact, which is immediately followed by acute pain, instability of the knee with swelling, difficulty bearing weight, and the feeling that the knee will give out. In sports medicine, the initial treatment of an acute ACL sprain includes ice, anti-inflammatory medication and physical therapy. This is directed at restoring the range of motion and strengthening the injured knee. A complete tear will require surgical reconstruction of the ACL, typically using a patellar tendon and a bone block at each end of the tendon graft. This surgery is a common procedure with extremely high success rates, returning the skier to the slopes within the year.



Traditional TCM treatment protocol for ACL repairs integrate acupuncture, cupping, *gui sha*, homeopathy and massage to assist in increasing the recovery rate and integrity of the ACL repair and overall rehabilitation process. Many coaches, sports medicine directors, and athletes are not willing to use herbs because of the fear of testing positive for a banned substance even though that banned substance is not in the herbal formula. Instead of herbal formulas, homeopathy is very effective. However, with many athletes, topical herbs are also very effective as part of the treatment. The treatment of ACL injuries by integrating Eastern medicine increases the rate and integrity of recovery. Understanding the mechanism of the most common injury associated with skiing enables an integrated perspective in providing treatment.

Other injuries associated with skiing may also benefit from TCM. One example of an Olympic skier benefitting from the use of acupuncture is Steven Nyman, who specializes in downhill skiing. He placed [19th in downhill skiing](#) at the 2006 Winter Olympic Games in Torino, Italy. In December of that year, he badly injured his back during a training run for the World Cup in Val Gardena, Italy. However, although he could barely walk, he went on to win the race. In an interview with *Ski* magazine not long after the 2006 injury, he stated, "I know how to win pretty much everywhere. It's a matter of being physically capable to do that. I've got to fix my back before anything else happens." [He used acupuncture](#) as part of his rehabilitation therapy after the injury. Now, of course, he is currently on the [competitive ski circuit](#), which may hopefully culminate in a podium spot for him at the Olympics.

Another Olympic hopeful, [Canadian aerial skier Veronika Bauer](#), is also using acupuncture as part of her plan to be back in the game in time for Vancouver. Last season, she suffered a complex concussion after hitting her head twice in two separate events. She was ordered on 10 months of bed rest, with no chance to train. Although she only recently was able to start training in time for Vancouver, [she remains hopeful](#) as to her chances. Her recovery regime included the use of acupuncture to help combat crippling headaches.

Although most skiers are not at the level of either Nyman or Bauer, there is still a proven treatment that can do wonders for ski-related injuries. TCM can prove invaluable in getting athletes back on their skis and out on the slopes.

Resources

- Feagin JA Jr., et al. [Consideration of the anterior cruciate ligament injury in skiing](#). *Clin Orthop* 1987;216:13-8.
- Fry J. *The Story of Modern Skiing*. Lebanon, NH: University Press New England, 2006.
- Johnson RJ. Alpine skiing injuries. In: *Winter Sports Medicine*. Philadelphia: FA Davis, 1990:351-8.
- Johnson RJ. [Skiing and snowboarding injuries: when schussing is a pain](#). *Postgrad Med* 1990;88:36-51.
- McConkey JP. [Anterior cruciate ligament rupture in skiing: a new mechanism of injury](#). *Am J Sports Med* 1986;14:160-4.
- McConkey JP. The toll on skiers' knees. *Emerg Med* 1986:25-44.
- www.Olympic.org
- Panchmatia JR. A review of skiing and snowboarding injuries. *Cambridge Med* 2007;21:3132.
- Stewart C. Winter sports injuries: a state-of-the-art review of diagnosis and treatment in the ED. *Emerg Med Rep* 1995;16:235-45.
- Warne WJ, Feagin JA Jr, King P, et al. Ski injury statistics, 1982 to 1993, Jackson Hole Ski Resort. *Am J Sports Med* 1995;23:597-600.
- Zlidenny A, et al. Comparison between frequency and location of skiing and snowboarding injuries. *Ann Emerg Med* 1999 Oct;34:4:s93.

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