



# USA Hockey's CEP Program

## Coaches

***The following is some good information on a very common early season injury, along with some advice on how to prevent it.***

## **The Hockey Doc on early-season groin injuries**

By Dr. Rob LaPrade

Over the years, one of the most commonly asked questions that I get asked is “What are some of the most common early-season hockey injuries and what can I do to prevent them?”

I can say without a doubt that the most common early-season injury that we see at the University of Minnesota is a hip adductor, or groin strain. In addition, in reviewing the NCAA and NHL ice hockey injury data, it is also the most common early-season loss of player practice and on-ice time.

Groin strains are caused by an irritation of one of the hip adductor muscles at the insertion of the pubic part of the pelvic bone. In addition, the point at which the muscle joins the tendon (the musculotendonous junction) can also become strained, irritated and swollen.

Groin strains are almost always due to a sudden change in training habits. In the majority of cases that we have seen, this occurs at the start of the season, with the initiation of a hard, on-ice training regimen.

The pain from a groin strain is almost always localized to the pubic part of the pelvic bone or at the muscle-tendon interface of the adductor muscles in the groin region. This pain is almost always increased with any maneuver in which the thigh crosses the midline of the body, especially with power skating and crossovers.

The treatment of groin strains is usually based upon the symptoms that are present with activities. Luckily, in the majority of cases, groin strains are a self-limited condition that will resolve with time. However, we recognize that a few days off during the early part of the season, especially during try-outs, can seem like an eternity to some players and coaches and can make the difference in making the team or not.

For minor injuries, a good stretching and warm-up program, followed by avoiding on-ice activities which cause symptoms, will usually result in the resolution of pain over the course of a few days. This would include avoiding any significant power skating or crossovers until the symptoms have completely resolved.

Over-the-counter anti-inflammatory medications, such as ibuprofen, can also serve a useful purpose to decrease some of the pain caused by the inflammation process. However, these anti-inflammatory medications will not cause this tissue to heal. They need to be used with a stretching, and appropriate warm-up program, to maximize the chance that you will get back on the ice sooner.

In the case where an athlete cannot skate because of pain, a program of rest, ice, and ultrasound is recommended until the athlete can resume skating. Cross training by cycling or pool therapy can help to keep up one's cardiovascular status until the symptoms improve.

In those cases where symptoms do not resolve over a week or two, further investigation should be performed to determine if that pain is from another source. These other sources include stress fractures (especially in female skaters), sports hernias, or an irritation of the pubic symphysis (where the two pelvic bones meet).

Overall, the best way to treat groin strains is to work on prevention. We attempt to have our players work with our strength coach and athletic trainer on a program of stretching, prior to the initiation of any on-ice activities, so that they do not develop groin injuries.

It is also equally important to know that a stretching program should not be initiated prior to warming-up appropriately. Studies have shown that the incidence of muscle strains is actually higher in athletes who stretch before warming-up than those who stretch after warming-up. Therefore, a short ¼ mile jog or 4-5 laps around the ice may be necessary to get the blood circulation going to the muscles, so that you will be able to stretch appropriately.

If the symptoms from a groin stain do not improve using this program, then follow-up with a physician may be advised to see if there are other causes of the source of the pain. It is not uncommon for the symptoms of sports hernias, which are due to tears of the abdominal wall muscles, to present similar to groin strains. Therefore, any groin strain which lasts more than a couple of weeks should be considered to be a possible sports hernia until it is ruled out of the diagnosis.

*Dr. Rob LaPrade, MD, PhD, is the team physician for the University of Minnesota men's hockey team and a professor in the Department of Orthopaedic Surgery at the University of Minnesota. This article was originally published in "Lets Play Hockey".*

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**For comments, or suggestions for future topics for "Coaches Clipboard" contact Chuck Gridley at [chuckgridley@aol.com](mailto:chuckgridley@aol.com).**