

View From the Training Room



One NHL trainer's approach to treating the challenges presented by a professional hockey team

By Andy Wood

► Professional hockey presents unique challenges to the modern athletic trainer. Defined as a "collision sport," it features highly conditioned athletes traveling at speed on narrow blades across a hard, unforgiving surface. Add long sticks and a puck traveling at speeds of up to 100 mph and you have a unique blend of circumstances that combine to create numerous injuries.

Advances in protective equipment design and higher standards of refereeing have reduced the severity of injuries, but they are unfortunately still a daily occurrence.

We asked the trainer for the NHL's Buffalo Sabres, Tim Macre, ATC, CSCS, what all this means for someone trying to keep these athletes healthy. Macre started in 1996 as the athletic trainer for the New York Rangers' top affiliate in the American Hockey League, and in 2005 made the move to the Sabres.

Common wisdom has it that the most common injuries are upper-body lacerations and contusions; is that your experience?

Macre: I do see quite a few facial lacerations, and a majority of the injuries we get are contusions to the foot, ankle, wrist and hand. This is due to the nature of the sport with pucks and sticks flying around on the rink.

The shoulder seems particularly vulnerable in hockey; have you found that to be true?

Macre: The shoulder itself is vulnerable, as it sacrifices stability for mobility. By that I mean that the glenohumeral joint has a very large range of motion, and we can get into positions that make the shoulder very unstable. Add the size of today's NHL player, and the speed at which the game is played today, and the shoulder can become very vulnerable.

Preventing shoulder injuries is the key. Proper warm-up and stretching before activity, as well as strengthening the rotator cuff and scapular stabilizers, goes a long way in keeping a shoulder healthy.

Players' knees must take a beating during a game. Do you do anything in particular to prevent injury to the knee?

Macre: I take a total body approach to prevention of injuries. I look at things in terms of the kinetic chain. In order to prevent knee injuries I address proper warm up, range of motion and strength of not only the knee, but also the foot/ankle and the hip/pelvis/low back. Motion and strength imbalances in any of these areas should be addressed in a good preventive program.

Are surgeries common among your players? If so, what do you see most and how do you approach postsurgical rehabilitation?

Macre: Surgeries are a necessity at times, and in the NHL, good outcomes are a must. Luckily, NHL players are very motivated when it comes to their rehabilitation program. Adherence to the physicians' protocol, and effectively completing each phase of the rehab program

are key in returning a player to competition. Range of motion, strength and functional ability, including sport specific activity, all must be addressed.

How fast do skills deteriorate when an athlete is off the ice due to injury?

Macre: The players I work with are some of the world's best at their sport, so I wouldn't really say that their skills deteriorate when they are off the ice due to an injury. We try to incorporate sport-specific activities in their rehab program whenever possible.

Is there anything you can do to prevent certain injuries?

Macre: I believe the key to preventing injury begins with proper hydration. If players are dehydrated and do not have the proper stores of electrolytes, then they are more susceptible to muscle strain. Proper warm-up before activity, stretching before and after activity, a good strength and conditioning program, and proper fitting protective equipment also go a long way in the prevention of injuries.

You are the first NHL trainer to use a Litecure Class IV laser in the locker room. How has that helped you and would you recommend it for other teams and/or sports?

Macre: The Litecure has been great this past season. The effectiveness of this laser in reducing pain levels of foot and ankle contusions, AC joint sprains and wrist sprains surprised even me. The deep penetration of this unit even allowed for use on hip flexor and groin strains with excellent results.

What other modalities do you use?

Macre: I try to not use a lot of modalities, and prefer a hands-on approach. That being said, when indicated, I use ultrasound, and have a variety of electrical stimulation units that we may use. To me one of the biggest indicators of the value of a modality is feedback. NHL athletes are very "in tune" with their bodies and will provide feedback throughout any treatment. Many of my players have identified the Litecure as a modality that truly helps them feel better and ask for it by name.

How do you keep up to date on the latest trends and research?

Macre: I read journals and attend educational symposiums in the offseason. I also talk to my peers, not only in the NHL, but also in the NFL, NBA and MLB, as to the latest techniques and equipment they have been using. ■

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