Ask the ATHLETIC TRAINER

Dear Athletic Trainer:

I am a high school freshman and recently hurt my thigh in a soccer game when I kicked the ball. My coach said that I probably strained my thigh muscle. What exactly is a "strain" and how can I prevent this from happening again?

~ "Still Limping"

Dear "Still Limping":

Muscle strains are the same thing as a "pulled muscle". When a muscle is over stretched it can cause some tiny tears in the muscle tissue. If the stretch is great enough, it can tear through a muscle completely. There are three grades to strains:

- Grade I: Over stretch of muscle tissue, tiny micro tears in muscle tissue.
- Grade II: Significant tear in muscle tissue. (Mild deformity is sometimes evident)

Grade III: Total rupture of muscle. (OUCH!!)

Prevention starts with a thorough warm-up and stretch in preparation for activity. Any time you feel pain, your body is sending a message.

Acute treatment of muscle strains consists of: **R**est, **I**ce, Compression, and Elevation (R.I.C.E.). An ice bag placed directly over the area of pain for no longer than 20 minutes will decrease the inflammation and much of the pain. Afterward, wrap the area with an elastic wrap to provide compression to control swelling, and support the area involved. When possible, seek an evaluation by a Certified Athletic Trainer (ATC) or physician.

Heads-Up on Head Injuries in Athletes

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Many athletes get their "bell rung". In general terms, what does this mean? The athlete sustains a brain "bruise" or a "concussion". A concussion is a violent jar or shock to the brain causing an immediate change in brain function, including a possible loss of consciousness. The effects of a concussion are usually temporary, but they may be cumulative; the more often they occur, the more long term effects are likely.

Symptoms depend on the extent of the injury. The presence or absence of swelling at the injury site is not related to the seriousness of the injury.

With a first degree or "mild" concussion, the athlete may be dazed, dizzy or confused momentarily. Symptoms often resolve within 15 minutes. A second degree head injury not only includes symptoms of the lesser injury, but may also include a headache. Symptoms often persist beyond 15 minutes and further medical attention is required. A third degree head injury often includes loss of consciousness, significant memory loss, and generally requires immediate medical attention and hospitalization.

Though concussions occur in all sports, football contact accounts for a significant amount of risk of head injury. Therefore, proper fitting head gear is essential. Some manufacturers of helmets make instructional videos to aid in the fitting process. It is the responsibility of the coach, equipment manager, or Certified Athletic Trainer (ATC) to ensure each athlete has a customized fit. Periodic checks should be done to maintain proper fit. Helmets should always be fitted and never just handed out.

Head injuries are usually curable with early recognition and medical treatment. Complications can be life threatening or cause permanent disability and brain damage. Return to play is a controversial subject and should be discussed at length with the treating physician. Factors such as the length of unconsciousness, amnesia and other altered brain functions, and whether there has been previous history of concussion, play a role in timing an athlete's return to sports.