GET ACTIVE. STAY ACTIVE

Are female athletes more prone to injuries than male athletes?

-Judy Clarkston

By: Michelle Daguanno, PT
Rehabilitation Institute of Michigan

Injuries are something that can plague any athlete, however there are some types of injuries that are more common in the female athlete than the male athlete. Some of the most prevalent are stress fractures and ligament strains of the knee.

**Stress Fractures**
A stress fracture is a small crack in the bone as a result of an overuse injury. Often it occurs because the muscles are fatigued and cannot absorb the impact from the surface the athlete is playing on or because of an increase in the physical activity exerted (a runner increasing her time or distance). The athlete often complains of pain in the area, which increases with activity, and is usually relieved with rest.

Medical studies indicate that women are often more susceptible to stress fractures because of a condition often found in female athletes called the “female athlete triad.” This refers to eating disorders, infrequent menstrual cycle, and decreased bone mass (osteoporosis).

Treatment of the stress fractures may include resting the involved body part from activity for 6-8 weeks, and advising the athlete in training habits that include proper stretching, nutrition, and proper equipment and shoe wear.

**Ligament Strains**
A ligament is a thick, strong band of fibrous tissue that connects bone to bone. The ACL (anterior cruciate ligament) and the PCL (posterior cruciate ligament) are the ligaments that form an “X” inside the knee to stabilize the knee during forward and backward movements. A sprain occurs when there is a tear in a ligament.

ACL injuries are two to eight times more common in women versus men, and one of the most common knee injuries. The experts are not certain why this happens in women more often, but the anatomy of the female knee, hormones, and muscle imbalances may play a role. These are typically caused from a twisting force, extreme straightening of the knee, and direct contact from the outside of the leg. The severity of the sprain ranges from a grade I mild tear to a grade III severe tear that is completely torn and the knee is unstable. The symptoms typically are pain in the knee, feeling a “pop” in the knee, swelling, discoloration or feeling that the knee will “give out.”

Treatment depends on the severity of the injury and the activity level of the athlete: Rest, ice, compression and elevation to start (RICE rule), possibly bracing, and rehabilitation. Surgery may be needed to reattach a torn ACL for those involved in rigorous sports.
Currently training programs are addressing the more specific needs of the female athlete especially balance, coordination and strengthening. This focused training appears to be resulting in a decrease of these injuries.

Please submit any questions you may have for our sports medicine experts by e-mailing cangelel@dmc.org. In the subject line, please write, “Get Active, Stay Active.” We will respond to all the questions we receive and select one each month to feature in our column.

A proud member of the Detroit Medical Center (DMC), Rehabilitation Institute of Michigan (RIM) is the largest provider and most trusted source for rehabilitation services in Michigan. The DMC is the official health care services provider of the Detroit Red Wings, Tigers, Pistons and Shock. Visit one of our 23 outpatient therapy sites in southeast Michigan. For a complete listing of outpatient services and locations, call 1-888-DMC-2500 or visit www.RIMrehab.org