

# **KNEE INJURIES--PART 2**

## **ANTERIOR CRUCIATE LIGAMENT TEAR**

By Dr. Boyd Williams

The anterior cruciate ligament is located deep inside the knee joint. It is responsible for stability of the knee as it runs between the bones of the upper leg, the femur, and the lower leg, the tibia.

The anterior cruciate can be injured when the tibia is forced backward on the femur, resulting in a sprain or tear to the ligament. Any force which drives the extended knee backward with a twisting motion, such as blows occurring in football or other contact sports, can cause this ligament injury.

The torn anterior cruciate ligaments will result in immediate pain. The athlete often remembers hearing a “pop” when the accident occurred. Swelling in the knee is often present. The athlete who sustains an anterior cruciate tear is at a greater risk of instability and future knee injury. The relative risk to the athlete depends upon the type of sport and level of competition.

Conservative treatment for the acute non-operative anterior cruciate ligament tear begins with immobilization with an external splint. Weight bearing or walking should begin early with the aid of crutches. Initial slow range of motion movements also will enhance the final outcome. Frequent icing should help control pain and swelling. Isometric exercises, concentrating on the hamstrings first, are important to promote knee stability and maintain muscle function. When motion is pain-free, gentle weight training and bicycling may begin. As strength returns to the leg, progressive return to activity may begin with the aid of a Lenox-Hill brace.

For more information on this or other health topics, including information about our services, go to [www.familychiroclinic.org](http://www.familychiroclinic.org) or call us at 507-281-4878.