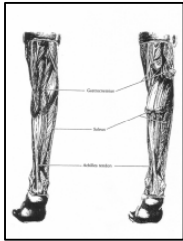


## ACHILLES TENDONITIS

Participation in physical activity, especially running and jumping sports, puts great demands on the muscles and tendons of the lower limbs. The Achilles tendon is a common site of tendonitis. This large tendon runs from the middle of the calf to the heel, and is the common tendon to which the gastrocnemius and soleus muscles attach. Since these muscles provide the force to propel the body forward or upward, the tendon must withstand both tensile and twisting forces to do its job. Sports which require quick stops, starts and pivoting, compound these stresses and often lead to tendonitis or even tearing of the tendon.



Unaccustomed activity, overtraining and biomechanical mal-alignments can also contribute to injury. In addition, footwear can cause irritation by rubbing the tendon where it attaches to the heel (i.e. tightly laced skates or boots).

Symptoms of Achilles tendonitis include pain in the back of the heel, ankle

or lower leg; swelling along the course of the tendon; and in chronic cases, thickening of the tendon. Pain is more severe with weight-bearing activities. It is often more painful walking barefoot or in flat shoes because this stretches the tendon more than shoes with a higher heel.

Conservative treatment starts with ice, rest, and sometimes anti-inflammatory medication. It is important to discontinue the activities that caused the injury at this stage. Physical therapy management is directed toward reducing symptoms and restoring the function of the muscle-tendon unit. Ice, friction massage and ultrasound can be helpful in the initial stages. Stretching and strengthening are progressively added, not only for the calf, but for the entire lower extremity. Special attention is paid to strengthening the calf through its entire range, and in both lengthening and shortening activities. Foot orthotics can be helpful by controlling excessive pronation, which causes excessive twisting and stretching of the Achilles tendon. A gradual return to sports will decrease the incidence of recurrence.