

Achilles agony

Don't ignore a recalcitrant Achilles tendon

By Dr. Jordan D. Metzl, MD

The legend of Greek warrior Achilles is well known. As the story goes, Achilles was dipped into the river Styx by his mother when he was an infant.

The river shielded Achilles from injury, but his mother's hands prevented the waters of the Styx from touching Achilles' heel, rendering that part of his body vulnerable. According to the myth, Achilles was killed during the Trojan War when an arrow was shot through the only susceptible area of his body. The moral: the Achilles tendon, otherwise known as the Achilles heel, is a vulnerable area of the body.

Many years later, Robert, a 37-year-old triathlete, comes into my office. "Doc, it hurts right here in my Achilles. I'm having trouble running and biking," he says.

"Robert," I tell him, "you need to remember your Greek mythology."

"Doc, have you lost your marbles?" he asks.

The Achilles is a thick tendon that connects the gastrocnemius and soleus muscles to their insertion point at the heel bone. Achilles injuries can occur in several places. Occasionally they occur in the muscle, in which case they are referred to as strains; however, these injuries tend to heal relatively quickly due to the abundant blood flow to the muscle.

Indeed, a more common place for Achilles injuries is at the muscle-tendon junction—the area where the muscles converge into the tendon. This spot is visible about halfway down the back of the leg where the muscles form a letter "V." Injuries in this area tend to heal spontaneously, though they do so more slowly than injuries in the muscular area of the leg, since the blood supply isn't as good.



John Seagata/wahoomedia.com

Unfortunately, however, Robert comes in with the most serious of Achilles afflictions, an injury to the tendon itself. The Achilles tendon is about 10 centimeters long and forms the thick, rope-like structure at the back of the leg. Irritation of a tendon, tendonitis and chronic irritation of a tendon with fluid build-up, tendinosis, are both common Achilles injuries.

When persistent Achilles tendon pain is not given proper attention, chronic tendonitis can lead to a degenerative tear in the tendon, often characterized by a lump on the side of the tendon. When this is present, there is risk of either chronic, career-threatening Achilles pain or possibly Achilles tendon rupture.

GETTING YOUR R & R

So, what should you do when the Achilles is sore? A day or two of discomfort is fine, but pain that lasts for more than several days or, more importantly, pain that results in limp-



ing or altered gait needs to be checked out. In rehabilitation, a therapist or athletic trainer will use ultrasound, electrical stimulation, ice and, eventually, a combination of stretching and strengthening to fix the problem.

As is the case with many injuries, keeping fit during the process of healing and rehabilitation is crucial. In general, swimming is fine while recovering from an Achilles injury, and biking is acceptable, too, if it can be done pain-free. The no-no is running, which can quickly make a painful Achilles injury even worse.

The location of the Achilles injury is the key. Again, high, muscular calf strains tend to heal relatively quickly. Muscle-tendon junction strains heal a little more slowly, and injuries in the tendon itself can become lifelong problems if not allowed time to heal.

With Robert, his Achilles had a small lump and was painful, so I sent him for an MRI, which showed a small, partial tear in

the tendon. I put him in a walking boot cast for several weeks. When he was pain-free, I started him in physical therapy so he could begin to regain his strength and remedy the underlying lack of flexibility that caused the injury in the first place. His foot mechanics were also corrected through the use of an orthotic, which helped prevent the pronation (rolling in of the foot) that contributed to his problem. His injury took three months to fully heal, but now he is better and going strong.

So, listen up and remember your mythology. There's a little Achilles in all of us. ▲

Jordan D. Metzl, MD, is a nationally recognized sports-medicine specialist at Hospital for Special Surgery in New York City. In addition, Dr. Metzl is a 25-time marathon runner and now a four-time Ironman finisher.