



THE ACHILLES TENDON

Exercises to Treat and Beat Tendonitis

by **DAVID BARLOW**

For many of us, our focus on training and injury prevention tends to be directed at the knees, hips, and core stability muscles.

What we often overlook is the need to address the supporting muscles in the lower leg and foot, specifically the Achilles tendon.

The Achilles tendon is one of the thickest and strongest tendons in the body. It is formed from the gastroc and soleus muscles and attaches to the base of the heel. Proper function of this complex is what gives us the power to push off, jump, and control landing postures. It is comparable to the shocks in a car and absorbs the impact from landing to control the weight of our body.

TENDONITIS

Achilles tendonitis is generally considered a condition that occurs from overuse, causing the tendon to become inflamed or resulting in trauma to the tissue, such as micro tearing. This can occur when individuals significantly increase the amount of time they are playing or early in the season when individuals are under-conditioned or returning from a long layoff period.

Pain is usually along the mid portion of Achilles tendon into the back of the heel. Pain will occur with active attempts to push up on the toes or stretch the calf. More severe cases will cause a limp or an inability to run or push off the toes. In the early stages, many individuals can still participate once warmed up, but will often have stiffness and pain that develops hours later. The more severe the condition becomes, the harder it will be to loosen up, and pain will gradually prevent participation all together.



Gastroc Soleus Stretches



Heel Raises



Single Leg Russian Dead Lift



Clamshell

TREATING TENDONITIS

Rest, icing, and light stretching are the most effective measures for early treatment of acute cases. Once significant pain has subsided, stretching and strengthening the calf and lower legs and hips are imperative in managing this condition.

Eccentric loading exercises (attributed to Hakan Alfredson) have become a mainstay for treatment. They simulate many of the actions performed when landing from a jump or performing a hard stop or change of direction. Additional hip and core strengthening can also help improve mechanics and reduce the load on the Achilles.

EXERCISES

Gastroc Soleus Stretches

1. Stand with leg straight and heel pressed back. Hold 30 seconds.
2. Stand with a closer leg position, keeping the heel down, bend and push the knee over the foot and second toe. Hold 30 secs. Repeat 2-3 times.

Heel Raises

Stand on two legs on the edge of a stair. Raise up on both toes, then lift one foot and slowly lower down past

the edge of stair on the injured foot.

Repeat 2 sets of 10 reps.

Toe Walking

Walk on your toes without letting the heel sag. Perform 5 sets for 20 feet.

Single Leg Russian Dead Lift (RDL)

Stand on one leg, allowing the knee to be unlocked, and reach toward the floor with the opposite arm. Maintain the knee in line with second toe.

Repeat 2 sets of 10 reps.

Single Leg Balance on Foam/Pillows

Stand on one leg in an unsupported position. Use a soft surface to increase balance control and challenge. Hold 30 seconds.

Hip Abduction

Lay on your side, keeping bottom leg slightly bent. Top leg should be straight with toes forward and hip slightly extended. Raise top leg through a small range of motion. Repeat 2 sets of 20 reps.

Clamshells

Lay on your side with knees and hips bent 45 degrees, keeping bottom leg flat. Lift and rotate the top knee up and back using the foot as a fulcrum on the bottom leg. Avoid rotating through the back; use only the hip. Repeat 2 sets of 20 reps.

I recommend working these exercises into a daily routine for 4-6 weeks to strengthen your tendon and improve its mobility. Listen to what the body is telling you and adjust accordingly. Play smart. For prolonged cases lasting more than two to three weeks, it is recommended to seek additional advice. Specialized footwear, heel lifts, kinesio tape, and local treatment such as modalities, massage, and dry needling may help to speed your recovery. Here's to a pain-free and healthy paddle season. «»

DAVID BARLOW, DPT, OCS, is the owner of BE Fit Physical Therapy, with locations in Hanover, New Hampshire, and White River Junction, Vermont. He has been focused on orthopedic sports rehab since 1998. He is affiliated with the Norwich Racquet Club (VT) and has run the Green Mountain Open tournament for the past 10 years.

