

## Achilles Tendinopathy Protocol

Week one to four	Weeks four to eight
Initial Evaluation	Evaluate
<ul style="list-style-type: none"> <li>➤ Active range of motion ( especially DF with knee extended and flexed)</li> <li>➤ Swelling/tenderness</li> <li>➤ Gait</li> <li>➤ Subtalar Joint ROM, forefoot alignment</li> <li>➤ Plantar flexion strength and endurance</li> <li>➤ Assess RTW and sport expectations</li> <li>➤ Abnormal lower extremity biomechanics/deviations</li> </ul>	<ul style="list-style-type: none"> <li>➤ Active range of Motion</li> <li>➤ Swelling and tenderness</li> <li>➤ Balance/single leg heel raise</li> </ul>
Patient Education	Patient Education
<ul style="list-style-type: none"> <li>➤ Support Physician prescribed meds</li> <li>➤ Discuss use of orthotics, heel lift or night splint if needed</li> <li>➤ Discuss frequency and duration of treatment (2-3x/wk is expected for 4-8 weeks depending on how the patient presents)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Recommend appropriate training limits</li> </ul>
Therapeutic Exercise	Therapeutic Exercise
<ul style="list-style-type: none"> <li>➤ Initiate stationary bicycle</li> <li>➤ Incorporate an eccentric loading program as symptoms allow</li> <li>➤ Pelvic stabilizer strengthening</li> <li>➤ Gastroc and Soleus stretching as tolerated</li> </ul>	<ul style="list-style-type: none"> <li>➤ Elliptical/walking on treadmill</li> <li>➤ Progress squatting activity, and forward step up</li> <li>➤ Single leg isotonic planes. Emphasize single leg eccentric</li> <li>➤ Progress to closed chain exercises on unstable surfaces</li> <li>➤ Core and pelvic stabilizer strengthening</li> <li>➤ Single leg dynamic balance</li> </ul>
Manual Techniques	Manual Techniques
<ul style="list-style-type: none"> <li>➤ STM including Graston Technique</li> <li>➤ PROM , Mobilization</li> <li>➤ Taping</li> </ul>	<ul style="list-style-type: none"> <li>➤ PROM, Mobilization as needed</li> </ul>
Modalities	Modalities
<ul style="list-style-type: none"> <li>➤ Modality use as indicated based on the presence of inflammation to be determined on a case by case basis via the physician and or clinician</li> </ul>	<ul style="list-style-type: none"> <li>➤ Modality use as indicated based on the presence of inflammation to be determined on a case by case basis via the physician and or clinician</li> </ul>
Goals	Goals
<ul style="list-style-type: none"> <li>➤ Control pain</li> <li>➤ Reduce swelling and tenderness</li> <li>➤ Increase gastroc strength and endurance</li> <li>➤ Normalize gait</li> </ul>	<ul style="list-style-type: none"> <li>➤ Able to SL heel raise without pain</li> </ul>

<b>Weeks eight to discharge</b>
<b>Evaluate</b>
<ul style="list-style-type: none"> <li>➤ Strength and balance</li> <li>➤ Address any deficits that may limit return to work or sport goals</li> <li>➤ HEP compliance</li> </ul>
<b>Therapeutic Exercise</b>
<ul style="list-style-type: none"> <li>➤ Progress balance activity to single leg dynamic activity and unstable surfaces</li> <li>➤ Sports specific exercises</li> <li>➤ Complete agility and running activity as tolerated</li> <li>➤ May begin bilateral low level plyometrics as tolerated</li> <li>➤ Encourage participation in the CFA</li> </ul>
<b>Manual Techniques</b>
<ul style="list-style-type: none"> <li>➤ Modality use as indicated based on the presence of inflammation to be determined on a case by case basis via the physician and or clinician</li> </ul>
<b>Modalities</b>
<ul style="list-style-type: none"> <li>➤ Any as Indicated</li> </ul>
<b>Goals</b>
<ul style="list-style-type: none"> <li>➤ Normal strength</li> <li>➤ Return to work or sport</li> <li>➤ Independence with HEP</li> </ul>

**References:**

C. R. Carcia, M.L. Robroy, J. Houck, D. K. Wukich. Achilles Pain, Stiffness, and Muscle Power Deficits: Achilles Tendinitis. J Orthop Sports Phys Ther. 2010.

J. Dubin. Evidence Based Treatment for Achilles Tendon Injuries – Review of Literature 2000.

M. Moeller, K. Lind, J. Styf, J. Karlsson. The Reliability of Isokinetic Testing of the Ankle Joint and a Heel-raise Test for Endurance. 2005