

## Achilles Tendon Non-Op and Op Treatment Rehabilitation Protocol

**Table 1**

**Sample Functional Rehabilitation Protocol for Use After Surgical or Nonsurgical Management of Acute Achilles Tendon Ruptures**

Postoperative Week	Protocol
0-2	Posterior slab/splint Non-weight bearing with crutches immediately post-operatively in patients who undergo surgical treatment or immediately after injury in nonsurgically treated patients
2-4	Controlled ankle motion walking boot with 2-cm heel lift <sup>a,b</sup> Protected weight bearing with crutches Active plantar flexion and dorsiflexion to neutral, inversion/eversion below neutral Modalities to control swelling Incision mobilization if indicated <sup>c</sup> Knee/hip exercises with no ankle involvement (eg, leg lifts from sitting, prone, or side-lying position) Non-weight-bearing fitness/cardiovascular exercises (eg, bicycling with one leg) Hydrotherapy (within motion and weight-bearing limitations)
4-6	Weight bearing as tolerated <sup>a,b</sup> Continue protocol of wk 2-4
6-8	Remove heel lift Weight bearing as tolerated <sup>a,b</sup> Slow dorsiflexion stretching Graduated resistance exercises (open and closed kinetic chain exercises and functional activities) Proprioceptive and gait training Ice, heat, and ultrasound therapy, as indicated Incision mobilization if indicated <sup>c</sup> Fitness/cardiovascular exercises (eg, bicycling, elliptical machine, walking and/or running on treadmill) with weight bearing as tolerated Hydrotherapy
8-12	Wean out of boot Return to crutches and/or cane as necessary; gradually wean off use of crutches and/or cane Continue to progress range of motion, strength, and proprioception
>12	Continue to progress range of motion, strength, and proprioception Retrain strength, power, and endurance Increase dynamic weight-bearing exercises, including plyometric training Sport-specific retraining

<sup>a</sup> Patients are required to wear the boot while sleeping.

<sup>b</sup> Patients are allowed to remove the boot for bathing and dressing but should adhere to the weight-bearing restrictions.

<sup>c</sup> If, in the opinion of the physical therapist, scar mobilization is indicated (ie, the scar is tight), the physical therapist can attempt to mobilize the scar with the use of friction or ultrasound therapy instead of stretching.

Adapted with permission from Willits K, Amendola A, Bryant D, et al: Operative versus nonsurgical treatment of acute Achilles tendon ruptures: A multicenter randomized trial using accelerated functional rehabilitation. *J Bone Joint Surg Am* 2010;92(17):2767-2775.