

Achilles Protocol

Dr. Joshua Boone



0-2 weeks

Posterior slab/splint; non-weight-bearing with crutches: immed. postop. in surgical group, after injury in nonop. group

2-4 weeks

Aircast walking boot with 2-cm heel lift*+

Protected weight-bearing with crutches

Active plantar flexion and dorsiflexion to neutral, inversion/eversion below neutral

Modalities to control swelling

Incision mobilization modalities++

Knee/hip exercises with no ankle involvement; e.g., leg lifts from sitting, prone, or side-lying position

Non-weight-bearing fitness/cardiovascular exercises; e.g., bicycling with one leg, deep-water running

Hydrotherapy (within motion and weight-bearing limitations)

4-6 weeks

Weight-bearing as tolerated*+

Continue 2-4 week protocol

6-8 weeks

Remove heel lift

Weight-bearing as tolerated*+

Dorsiflexion stretching, slowly

Graduated resistance exercises (open and closed kinetic chain as well as functional activities)

Proprioceptive and gait retraining

Modalities including ice, heat, and ultrasound, as indicated

Incision mobilization++

Fitness/cardiovascular exercises to include weight-bearing as tolerated; e.g., bicycling, elliptical machine, walking and/or running on treadmill, StairMaster

Hydrotherapy

8-12 weeks

Wean off boot

Return to crutches and/or cane as necessary and gradually wean off

Continue to progress range of motion, strength, proprioception

>12 weeks

Continue to progress range of motion, strength, proprioception

Retrain strength, power, endurance

Increase dynamic weight-bearing exercise, include plyometric training

Sport-specific retraining

*Patients were required to wear the boot while sleeping. +Patients could remove the boot for bathing and dressing but were required to adhere to the weight-bearing restrictions according to the rehabilitation protocol. ++If, in the opinion of the physical therapist, scar mobilization was indicated (i.e., the scar was tight or not moving well), the physical therapist would attempt to mobilize using friction, ultrasound, or stretching (if appropriate). In many cases, heat was applied before beginning mobilization techniques.

Operative versus Nonoperative Treatment of Acute Achilles Tendon Ruptures: A Multicenter Randomized Trial Using Accelerated Functional Rehabilitation

Kevin Willits, Annunziato Amendola, Dianne Bryant, Nicholas G. Mohtadi, J. Robert Giffin, Peter Fowler, Crystal O. Kean and Alexandra Kirkley
J Bone Joint Surg Am. 2010;92:2767-2775, published Oct 29, 2010;.2106/JBJS.I.01401