

Achilles Tendon Rupture Rehabilitation Protocol

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0 – 2 WEEKS ACTIVITY

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

2 – 4 WEEKS ACTIVITY

- 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 on leg, deep water running
- Hydrotherapy (within motion and weight-bearing limitations)

4 – 6 WEEKS ACTIVITY

- Weight-bearing as tolerated*^
- Continue 2-4 Week protocol

6 – 8 WEEKS ACTIVITY

- 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 ACTIVITY

- 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 ACTIVITY

- Continue to progress range of motion, strength, proprioception
- Retrain strength, power, endurance
- Increase dynamic weight-bearing exercise, including plyometric training
- Sport-specific training

* 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.