

## Achilles Rupture

### Postoperative Protocol

#### Postoperative Weeks 0-2

- Splint, nonweight-bearing with crutches: Immediately for the postoperative group, and immediately after injury in the nonoperative group

#### Postoperative Weeks 2-4

- Aircast® walking boot with 2-cm heel lift
- Partial protected weight-bearing with crutches; progressive increase in weight bearing 25 lbs/week
- 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; leg lifts from sitting, prone or side-lying position
- Nonweight-bearing fitness/cardiovascular exercises (bicycling with one leg, etc.)
- Hydrotherapy (within motion and weight-bearing limitations)

#### Postoperative Weeks 4-6

- Advance to full weight bearing with Aircast® boot; wean off crutches
- Continue weeks 2-4 protocol

#### Postoperative Weeks 6-8

##### **Goals:**

- Remove heel lift in boot
- 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

#### Postoperative Weeks 8-12

- Wean from boot; 1-cm silicone heel lift in sneaker x 6 weeks (then d/c)
- Return to crutches and/or cane if necessary and gradually wean off
- Continue to progress range of motion, strength, proprioception

#### Postoperative Weeks 12+

- Continue to progress range of motion, strength, proprioception
- Retrain strength, power, endurance
- Increase dynamic weight-bearing exercise, include plyometric training
- Sport-specific retraining; avoid high impact/pivoting sports for 6-months postop

**Patients are required to wear the boot while sleeping. Patients can remove the boot for bathing and dressing, but are required to adhere to the weight-bearing restrictions according to the rehabilitation protocol. If, in the opinion of the physical therapist, scar mobilization is indicated, scar mobilization should be attempted using friction, ultrasound or stretching (if appropriate). Heat may be applied as indicated before beginning mobilization techniques.**