

# Insertional Achilles Tendon Debridement

## *Rehabilitation Protocol*

**Procedure Overview:** Surgical treatment includes debridement of degenerative Achilles tendon tissue, excision of bone spurs at the calcaneal insertion, and reattachment of the Achilles tendon using suture anchors. Rehab emphasizes protecting the repair while progressively restoring strength, mobility, and function.

Timeframes mentioned in this protocol should be considered approximate with actual progression based on clinical presentation and physician direction.

### ***General Considerations:***

- Patient is non-weightbearing until 4 weeks post op
- Physical therapy begins approximately at 4 weeks post op
- Monitor the incision scar and tendon scar for mobility; implement regular soft tissue mobilization to avoid fibrosis.
- Discontinue boot at 8 weeks post op
- Discontinue night splint at 6 weeks post op

### ***Phase I: Protection & Immobilization (Weeks 0–4)***

#### **Goals:**

- Protect surgical repair and anchor fixation
- Control swelling and pain
- Maintain cardiovascular and proximal joint strength

#### **Precautions:**

- No active or passive ankle ROM
- No weight-bearing

#### **Interventions:**

- **Immobilization:** Short leg splint with ankle in neutral positioning for 10-14 days post-op.  
Transition to short leg cast with ankle in neutral at 10-14 days post-op until 4 weeks post op.

**Weight Bearing:** Non-weight bearing (NWB) with crutches, walker, or knee scooter.

#### **Exercises:**

- Isometric quads, glutes, core
- Toe curls/spreads
- Hip/knee ROM
- Upper body conditioning

### ***Phase II: Early ROM & Partial Weight Bearing (Weeks 4–6)***

**Goals:**

- Gradually restore passive and active ROM (neutral to plantarflexion)
- Transition to full weight-bearing in pneumatic walking boot
- Begin gentle loading of Achilles tendon

**Precautions:**

- Avoid aggressive dorsiflexion
- Avoid resisted plantarflexion
- No barefoot walking
- No plyometrics

**Weight Bearing:** Gait training with patient in pneumatic walking boot. Progress from non-weightbearing to partial weight bearing in boot with crutches/walker. Progress to full weight bearing in boot by week 6.

**ROM:** Initiate gentle AROM—plantarflexion, inversion, eversion. Limit dorsiflexion to neutral.

**Manual Therapy:** Soft tissue mobilization for scar tissue and modalities as indicated

**Exercises:**

- AROM
- Double Leg Proprioception (weight shifts, double leg standing, etc)
- Thera-Band exercises
- Intrinsic foot strengthening
- Seated Heel Raises
- Seated BAPs
- Well-leg stationary biking
- Aquatic exercises including deep-well exercises.

***Phase III: Strengthening & Gait Retraining (Weeks 6-12)*****Goals:**

- Restore normal gait without boot at 8 weeks post-op
- Improve Achilles strength and ankle control
- Obtain full AROM and PROM

**Precautions:**

- Avoid pain with exercises
- No plyometrics or explosive activities

**Interventions:**

- **Footwear:** Transition out of boot to supportive shoe at 8 weeks post-op
- **Gait Training:** Emphasize push-off and calf control

**ROM:** Progress to full ankle AROM/PROM

**Manual Therapy:** Soft tissue mobilization for scar tissue and modalities as indicated

**Exercises:**

- Stationary bike

- Progress seated heel raises to standing heel raises
- Mini-squats (bilateral progress to unilateral)
- Closed chain step exercises (step-ups progress to step downs)
- Leg Press (bilateral to unilateral)
- Proprioceptive training (single-leg balance challenged as able)

**Progression Criteria:**

- Physician indication
- Equal AROM and PROM bilaterally
- Single leg stance equal bilaterally or objective testing (STAR Excursion balance test, Y-Balance test, etc).
- Gait normalized

***Phase IV: Return to Desired Level of Activity (Weeks 16–24+)***

**Goals:**

- Maintain full ankle ROM
- Symmetric calf strength
- Return to desired activity level

**Precautions:**

- No return to high-impact activity until cleared by MD and PT
- Watch for symptoms of tendinopathy

**Manual Therapy:** Soft tissue mobilization for scar tissue and modalities as indicated.

**Exercises:**

- Eccentric heel drops (Double leg progress to single leg)
- Double leg heel raises progress to single leg heel raises
- Lunges (multidirectional and walking)
- Plyometric progression (Begin low-load jumping/hopping drills/double leg to single leg)
- Progress jogging and return to run program (approximately 16-20 weeks, once patient can perform a single leg heel raise with good mechanics)
- Agility drills (approximately 16-20 weeks, cleared by MD)
- Endurance training (low-impact cardio, elliptical, biking)

***Discharge Criteria:***

- Full, pain-free ROM
- 90% calf strength compared to uninvolved side
- Normalized gait and balance
- Return to desired activities and ADLs
- Physician indicates

