

# REHABILITATION GUIDELINES AFTER ACHILLES TENDON REPAIR

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*The intent of this protocol is to provide the therapist with guidelines of the post-operative rehabilitation course after an Achilles tendon repair. It should not be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam findings, individual progress, and/or the presence of post-operative complications. The therapist should consult the referring physician with any questions or concerns.*

**FREQUENCY:** Weeks 0-4: 2x/week. Weeks 4-12: 3x/week. Weeks 12-20: 2x/week. Weeks 20-28: 2x/weeks. Weeks 28-40: 1x/2 weeks

## **INDIVIDUAL CONSIDERATIONS:**

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### **PHASE I (0-3 weeks)**

#### ***Goals***

- Control inflammation and pain
- Full hip and knee motion

- Good quad control

### ***Cast***

- Short leg cast in neutral plantar flexion

### ***Weight-Bearing Status***

- NO Weight-Bearing

### ***Therapeutic Exercises***

- Hip and knee ROM and strengthening exercises
- Toe curls and toe spreads

### **PHASE II (3-6 weeks) Criteria**

- Healed incision
- Minimal swelling

### ***Goals***

- Restore normal gait

### ***Brace/Weight-bearing status***

- Walking boot in 30° plantar flexion, may be adjusted each week into dorsiflexion by 5° increments
- Start with toe-touch and increase to partial weight-bearing
- Wear boot for sleeping
- Continue with crutches

### ***Therapeutic Exercises***

- Start gentle active dorsiflexion until Achilles stretch is felt
- Passive plantar flexion
- No active plantar flexion or passive dorsiflexion

### **PHASE II (6-10 weeks)**

### ***Criteria***

- Healed wound
- Active and passive dorsiflexion to –10 degrees

### ***Goals***

- Establish normal gait
- Progress with strength, power, and proprioception
- Wean into regular shoe

### ***Brace and Weight-Bearing Status***

- Progress to full weight bearing
- May switch to shoes with a heel (cowboy boots, heel lift of ¼”)

### ***Therapeutic Exercise***

- Slowly progress with passive ROM and stretch on Achilles tendon
- Advance active dorsiflexion to neutral
- Initiate active plantar flexion at 8 weeks
- Begin stationary bike with heel push only
- Gait training
- May progress to pool swimming and jogging at 8 weeks

## **PHASE III (10-14 weeks)**

### ***Criteria***

- Normal gait

### ***Goals***

- Advance with strengthening and proprioception

### ***Brace and Weight-Bearing Status***

- Wean to regular shoe as tolerated
- Full weight bearing

### ***Therapeutic Exercises***

- Progress to cycling in shoe
- Full active ROM in all planes
- Gentle full passive ROM in all planes
- Begin and gradually increase active / resistive exercises of the Achilles (i.e. submaximal isometrics, cautious isotonics, Theraband)
- Swimming

## **PHASE IV (14 weeks-6 months)**

### ***Criteria***

- Enough strength and proprioception to advance to recreational activities

### ***Goals***

- Advance to recreational activities
- Transition to home PT program

### ***Therapeutic Exercises***

- Closed chain exercises: Controlled squats, lunges, bilateral calf raise (progress to unilateral), toe raises, controlled slow eccentrics vs. body weight
- Cycling, VersaClimber, elliptical trainer, rowing machine, Nordic Track (gradually)
- Plyometrics
  - Box Steps (6 and 12 inches)
- Proprioception
  - Balance on stable and unstable (BAPS) surface with eyes closed
  - Ball catching and throwing from stable and unstable surface

## **PHASE V (6-9 months)**

### ***Criteria***

- Full range of motion and strength

### ***Goals***

- Progress to all sports and physically demanding job

### ***Therapeutic Exercises***

- Progress to jogging, then running
- Plyometrics
  - Stair Running
  - Box Jumps (6 and 12 inches)
  - Progress with eccentric loading

- Proprioception
  - Mini-tramp bouncing
- Sports-specific drills (cutting, pivoting, start at 25% of speed and progress as tolerated)

***Release to Sports***

- Full painless ROM
- Full strength
- Able to perform all sports-specific drills