

# Comprehensive Orthopaedics, S.C.

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## REHABILITATION PROTOCOL AFTER ACHILLES TENDON REPAIR

*Flexor Hallucis Transfers*

### PHASE I

#### Weeks 1 and 2

Total nonweight bearing  
Keep cast dry

*Slow progression*

#### Week 3

##### Range of Motion Exercise

- Plantar flexion and dorsiflexion to neutral 2 sets of 20 repetitions
- Inversion and eversion 2 sets of 20 repetitions
- Circumduction (both directions) 2 sets of 20 repetitions

##### Strength Exercise

- Isometric inversion and eversion 2 sets of 20 repetitions (in neutral).
- Toe curls with towel and weight.

##### Therapy Adjuncts

- Gentle manual mobilization of scar tissue.
- Cryotherapy with caution for any open area of the wound.

Nonweight bearing

Put into Walker Boot when able to get to neutral position comfortably.

### PHASE II

#### Weeks 4 to 6

*Starting at wk 6*

##### Weight bearing status

- Progressive partial weight bearing to full load by week 6 in a Walker Boot.

##### Range of Motion Exercise

- Previous AROM exercise continued
- ~~Begin gentle passive stretching into dorsiflexion with strap or towel~~
- ~~From week 5, passive stretch continues into dorsiflexion with progressively greater efforts, knee at full extension and flexed to 35 to 45 degrees~~

*No ramp stretch*

- Begin standing calf stretch with knee fully extended and flexed at week 6

#### Stretch Exercise

- Isometric inversion and eversion, set of 10 repetitions
- Isometric plantar flexion, set of 10 repetitions
- One rubber band inversion, eversion, dorsiflexion and plantar flexion sets of 10 repetitions. Progress to 3 rubber bands by 5 weeks
- Stationary cycling to 20 minutes with the minimal resistance by week 5

#### Conditioning Activities

- Stationary cycling begins, 7-12 minutes minimal resistance
- Water exercise can begin under totally buoyant conditions with use of a flotation device
- No weight bearing activities can be done in the water

#### Therapy Adjuncts

- Manual mobilization of scar
- Cryotherapy
- From week 5, gentle cross fibre massage to Achilles tendon to release adhesions between tendon and paratenon
- Ultrasound, phonophoresis and electrical stimulation may be added for chronic swelling or excess scar formation.

### PHASE III

#### Week 6-12

##### Weight Bearing Status:

- Full weight bearing in cowboy boots (1-1.5 heels)

##### Range of Motion Exercise:

- Further progressed with standing calf stretch

##### Strength Exercise:

- Omit isometrics

- Continue 3 rubber band ankle strengthening in all directions
- Begin double legged toe raises with body weight as tolerated
- Balance board exercises are begun for proprioceptive training

Therapy Adjuncts:

- As needed

**PHASE IV: Weeks 12 and beyond:**

Strength exercises:

- Toe raises should progress to use of additional weight at least as great as body weight and in the case of athletes, up to 1.5 times body weight
- Single legged toe raises are begun as tolerated

Conditioning exercises:

- Progress to jogging on a trampoline and then to treadmill running via a walk-run program
- Eventually perform steady-state outdoor running up to 20 minutes before adding figure eight and cutting drills
- Water exercise performed in shallow water (waist deep)  
In the water, begin to include hopping, bounding, jumping drills

The completely rehabilitated Achilles tendon repair allow 15-20 degrees of dorsiflexion at the ankle, and this must be maintained with regular stretching of the gastrocnemius-soleus group. Strength and endurance are developed to preinjury levels, and continued strength and flexibility work is advised.