



## **Achilles Tendon Repair Surgically Treated**

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- Phase I – Immediate Post-Operative Phase (Week 0-2)
  - Goals
    - Protection of repaired tissue
    - Keep splint clean and dry
  - Weight Bearing
    - Non-weight bearing in plantarflexion splint
  - Toe exercises
    - Flexion/extension (3x20 repetitions, once per hour)
  
- Phase II – Protection Phase (Week 2-4)
  - Goals
    - Protection of repaired tissue
  - Walker brace (boot) with 3 heel wedges
    - Wear boot while sleeping for 6 weeks
    - Allowed to remove boot for washing and airing the foot. When boot is removed, no weight bearing or dorsiflexion of foot is allowed.
  - Weight Bearing
    - As tolerated in boot
    - Use of crutches as needed
  - Exercise program
    - Home exercises
    - Performed while wearing boot
    - Isometric submaximal plantar flexion (5x5 seconds, once per hour)
    - Toe exercises (flexion/extension, once per hour)
  
- Phase III – Intermediate Phase
  
- After 4 weeks
  - Goals
    - Protection of repaired tissue
  - Walker brace (boot) with 2 heel wedges
    - Wear boot while sleeping for 6 weeks
    - Allowed to remove boot for washing and airing the foot. When boot is removed, no weight bearing or dorsiflexion of foot is allowed.

- Weight Bearing
  - As tolerated in boot
  - Use of crutches as needed
- Exercise program
  - Home exercises as above, may increase intensity
- Physical Therapy (2x per week)
  - Begin after week 4
  - Exercise bike in boot
  - AROM to 15 degrees plantar flexion without boot
  - Active plantar flexion with yellow band (ROM as above)
  - Sitting heel-rise – no weight-bearing (starting position from the heel height)
  - Gait training and balance exercises with boot without crutches
  - Squats (fitness ball behind back)
  - Other hip/knee exercises with no ankle involvement
- After 6 weeks
  - Walker brace (boot) with 1 heel wedge
    - Full weight-bearing
    - Allowed to remove boot for washing and airing the foot. When boot is removed, no weight bearing or dorsiflexion of foot is allowed.
  - Exercise program
    - Home exercises as above, may increase intensity
  - Physical Therapy (2x per week)
    - Exercise bike in boot
    - AROM to 10 degrees plantarflexion without boot
    - Sitting heel-rise – no weight-bearing (starting position from the heel height)
    - Supination/pronation exercises with rubber band
    - Gait training and balance exercises with boot
    - Squats (fitness ball behind back)
    - Other hip/knee exercises with no ankle involvement
- After 7 weeks
  - Walker brace (boot) without heel wedges
    - Full weight bearing
  - Exercise program
    - Home exercises as above, may increase intensity
  - Physical Therapy (2x per week)
    - Exercise bike in boot
    - AROM to 0 degrees plantarflexion without boot

- Active plantar flexion in cable machine (ROM as above)
  - Sitting heel-rise – with weight
  - Supination/pronation exercises with rubber band
  - Gait training and balance exercises with boot
  - Squats (fitness ball behind back)
  - Other hip/knee exercises with no ankle involvement
  - Leg press
- After 8 weeks
  - Visit to Dr. Hess
  - Wean off boot
  - Use of shoes with bilateral heel lift for 4 weeks
  - Home exercises
    - Active ankle exercises for ROM, with rubber band, balance exercises, sitting heel-rise, standing heel-rise (50% WB or less on injured side)
  - Physical Therapy (2x per week)
    - Exercise bike
    - AROM to tolerance
    - Active plantar flexion in cable machine (max 0 degrees plantar flexion)
    - Sitting heel-rise – with weight
    - Standing heel-rise on 2 legs
    - Supination/pronation exercises with rubber band
    - Gait training and balance exercises with boot
    - Squats (fitness ball behind back)
    - Other hip/knee exercises with no ankle involvement
    - Leg press heel-rise (max 0 degrees plantar flexion)
- After 9 weeks
  - Use of shoes with heel-lift until 12 weeks after surgery
  - Home exercises
    - As above
    - Walking 20 min per day
  - Physical Therapy (2x per week)
    - As above, increase intensity
    - Balance exercises
- After 14 weeks
  - Use of regular shoes after 12 weeks, barefoot after 14 weeks
  - Home exercises

- As above
- Physical Therapy (2x per week)
  - Intensify exercises by increasing load
  - Increase load gradually from 2 leg standing heel-rises to 1 leg
  - Both concentric and eccentric
  - Quick rebounding heel-rises
  - Gentle jogging
  - Start with 2-legged jumps, gradually increase
- After 16 weeks
  - Visit to Dr. Hess
  - Running outdoors (if good technique)
  - Return to sports at earliest after 16 weeks (non-contact) and 20 weeks (contact)