

Non-operative Treatment for Achilles Tendon Ruptures

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Accelerated Rehabilitation Program

1-2 Weeks

- Cast with ankle in plantar flexion of approximately 20 degrees
- Non-weight bearing with crutches

2-6 weeks

- Walking boot with 2-4 cm heel lift
- Protected weight-bearing with crutches
 - Week 2-3 - 25%
 - Week 3-4 - 50%
 - Week 4-5 - 75%
 - Week 5-6 - 100%

6-8 Weeks

- Start removing heel lifts (2 cm lifts x 2 with 3 peel-off sections each (6 total). Remove one peel off every 2-3 days as tolerated. Entire process should take around 2-3 weeks)
- Active plantar and dorsiflexion range of motion exercises to neutral, inversion/eversion below neutral
- Modalities to control swelling (US, IFC with ice, Acupuncture, Light /Laser therapy)
- Scar mobilization and education re. wound management.
- EMS to calf musculature with seated heel raises when tolerated.
- Patients being seen 2-3 times per week depending on availability and degree of pain and swelling in the foot and ankle.
- Knee/hip exercises with no ankle involvement e.g. leg lifts from sitting, prone or side-lying
- Non-weight bearing fitness/cardio work e.g. biking with one leg (with boot walker on), deep water running (usually not started to 3-4 week point)
- Hydrotherapy (within motion and weight-bearing limitations)
- Emphasize need of patient to use pain as guideline. If in pain back off activities and weight bearing.
- Continue with EMS on calf with strengthening exercises. **Do not go past neutral ankle position.**
- Weight – bearing as tolerated, usually 100% weight bearing in boot walker at this time.
- Active assisted dorsiflexion stretching, slowly initially with a belt in sitting

- Graduated resistance exercises (open and closed kinetic chain as well as functional activities) – start with Theraband tubing exercises
- **With weighted resisted exercises do not go past neutral ankle position.**
- Gait retraining now that 100% weight bearing
- Fitness/cardio to include weight –bearing as tolerated e.g. biking
- Hydrotherapy

8-12 weeks

**** Ensure patient understands that tendon is still very vulnerable and patients need to be diligent with activities of ADL and exercises. Any sudden loading of the Achilles (e.g. Trip, Step up stairs etc.) may result in a re-rupture****

- Wean off boot (usually over 4-5 day process – varies per patient)
- Wear Compression ankle brace to provide extra stability and swelling control once walking boot removed.
- Return to crutches/cane as necessary and gradually wean off
- Continue to progress range of motion, strength, proprioception exercises
- Add exercises such as stationary bicycle, elliptical, walking on treadmill as patient tolerates.
- Add wobble board activities – progress from seated to supported standing to standing as tolerated.
- Add calf stretches in standing (gently) **Do not allow ankle to go past neutral position.**
- Add double heel raises and progress to single heel raises when tolerated. **Do not allow ankle to go past neutral position.**
- Continue physiotherapy 1-2 times a week depending on how independent patient is at doing exercises and access they have to exercise equipment.

12-16 weeks

- Continue to progress range of motion, strength, and proprioception exercises
- Retrain strength, power, endurance through eccentric strengthening exercises and closed kinetic chain exercises
- Increase cardio training to include running, cycling, elliptical as tolerated

16 weeks +

- Increase dynamic weight bearing exercise, including sport specific retraining

4-6 months

- Return to normal sporting activities that do not involve contact or sprinting, cutting, jumping etc
- Patient needs to have regained approximately 80% strength to participate

6-9 months

- Return to all sports as long as patient has recovered 100% strength after being cleared by physician