

# ACHILLES TENDON REPAIR

## Post-op weeks 0-4

- Patient will begin therapy at approximately 4 weeks post-op. Before that point they will have been **NWB for 4 weeks**. Usually patient will have been casted for about 2 weeks and then fitted in a walking boot. They should arrive to PT in the walking boot set at about 15 degrees plantar flexion, ambulating TTWB with two crutches or a walker.

## Post-op weeks 4-6

- PWB in walking boot, two crutches, beginning at week 4 (if no Achilles pain).
- Boot set at 15 degrees PF, no movement allowed.
- PT is for ROM and gentle stretching at this stage (also for scar tissue massage if/when wound has healed, steri-strips off).
- Modalities: cryotherapy and e-stim for edema control
- **Exercises to be performed at this stage are as follows and should be performed as long as no increased discomfort is experienced in the Achilles region.**
  - Ankle AROM in all planes (DF, PF, INV, EV, CW, CCW, ankle alphabet)
  - NWB gastroc and soleus towel stretches
  - Intrinsic foot exercises (marble pick-up and towel scrunches)
  - Seated BAPS
  - Stationary bike (low resistance)
  - NWB LE exercises such as SLR, SAQ, LAQ, and hamstring curls.

## Post-op weeks 6-8

- Walking boot to allow 0-20 degrees motion during ambulation, PWB.
- Progress PWB and wean from crutches as tolerated.
- Continue PROM and joint mobilizations as needed.
- Continue scar tissue massage.
- Continue cryotherapy and e-stim for edema control as needed.
- **Exercises to be performed at this stage are as follows and should be performed as long as no increased discomfort is experienced in the Achilles region.**
  - Theraband exercises (DF, PF, INV, EV)
  - Gait training out of boot
    - Begin with unilateral on treadmill emphasizing heel to toe contact
    - Progress to bilateral treadmill and /or level ground ambulation
  - Leg press/shuttle exercise with light resistance if ROM allows
  - Unilateral balance on stable surface (only at week 8 if patient is ready)

## Post-op weeks 8-10

- FWB without assistive device,
- Progress walking boot ROM slowly from 0-20 degrees to full as tolerated by patient.
- PROM and joint mobilizations as needed.
- Begin weight bearing and balance exercises as tolerated.
- Unilateral balance on stable surface (progress to unstable as tolerated)

- Exercises:
  - Standing gastroc and soleus stretches
  - FWB exercises such as partial squatting and partial lunging
  - Contrakicks and advanced dynamic balance exercises
  - Bilateral calf raises (start supine on shuttle or leg press machine)
  - Standing BAPS
  - Continue gait training to eliminate antalgic pattern

### **Post-op weeks 10-12**

- At week 10 discontinue walking boot.
- Continue manual techniques as needed (PROM, scar tissue massage, manual stretching)
- Exercises:
  - Moderate paced walking on treadmill
  - Stairmaster
  - Progress squatting and lunging depth
  - Unilateral balance (stable, then unstable) with ball toss
- Goal is to discharge from PT by the 12-week mark.
- Be sure to educate patient on continued healing and risk of re-injury
- At 12 weeks patient should be able to do the following with minimal pain:
  - Full squat
  - Full lunge
  - Unilateral calf raise

Return to sport (running, soccer, baseball/softball, volleyball, etc) at 6 months post-op.