

## **General Principles:**

The total length of rehabilitation will vary depending on the following factors: severity or acuteness of injury, age, health or personal goals of patient.

### **0-2 Weeks**

- Walking boot with 2 heel lifts (about 30 degrees of plantarflexion)
- Partial weightbearing with crutches
- Work on toe curls, toe spreads
- Knee ROM
- Straight leg raises

### **2-6 Weeks**

- Walking boot with 2 heel lifts (about 30 degrees of plantarflexion)
- Weight bearing as tolerated without crutches
- Modalities to control swelling (US, IFC with ice, Acupuncture, Light /Laser therapy)
- Knee/hip exercises with no ankle involvement e.g. leg lifts from sitting, prone or sidelying
- 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)

### **6-8 Weeks**

- Start removing heel lifts. Remove 1 heel lift at 6 week mark and the other at week 7
- Weight bearing as tolerated without crutches
- Active plantar and dorsiflexion range of motion exercises to neutral, inversion/eversion below neutral
- Scar mobilization and education regarding wound management
- 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
- Active assisted dorsiflexion stretching, slowly initially with 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

- 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
- 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

### **4-6 months**

- Increase dynamic weight bearing exercise, including sport specific retraining
- 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