# NON-OPERATIVE ACHILLES TENDON RUPTURE REHABILITATION PROTOCOL

This protocol provides you with general guidelines for initial stage and progression of rehabilitation according to specified time frames, related tissue tolerance and directional preference of movement. Specific changes in the program will be made by the physician as appropriate for the individual patient.

\*\*\*\*Please fax initial assessment and subsequent progress notes directly to IBJI at 847-234-2090\*\*\*

REMEMBER: It can take up to a year to make a full recovery, and it is not unusual to have intermittent pains and aches during that time! Swelling may be on-going for 6 months to a year following injury.

# **FOR PATIENTS Recovery at a glance:**

- Non-weight bearing in short leg cast with plantar-flexion position for 4 weeks
- Cast off at 4 weeks with transition to weight bearing in boot x 6 weeks with heel lifts
- Between weeks 8-10 heel lifts are gradually removed
- Use assistive device (walker, crutches, rollabout) at all times for safety
- Physical therapy to start at 6 weeks
- Wear CAM boot sleeping until 6 weeks
- At 10 weeks SLOWLY transition to regular shoe wear
- You may begin driving at 10 weeks if right foot, automatic transmission prior only for left
- You may begin gentle biking and swimming at 10 weeks
- Running and higher impact activities can take up to 6 months or longer
- Once you can come up and down on your toes (single heel rise), or you can hop on the
  affected foot (single leg hop), you may return to sports and all activities. This may take 6
  months to a year.

# FOR PHYSICAL THERAPISTS

# **Detailed recovery / rehabilitation protocol:**

### Phase I: Weeks 1-4

#### Goals

- NWB plantar flexion short leg cast
- Patient education and gait training with assistive devices
- Gradual increase of ADL (activities of daily living)

#### Guidelines

- NWB when walking, standing. Use assistive device for safety all times
- Hip/knee ROM and OKC bed based strengthening (SLR, SAQ, etc)

# Physical therapy to start at 6 weeks

# Phase II: Weeks 4-10 post op

#### Goals

- Improve core, hip, knee and ankle strength/ROM (OKC only until 4 weeks WBAT in boot)
- Gradual increase weight bearing with boot at 4 weeks (as directed by surgeon or staff)
- Heel lifts removed one per week starting at 8 weeks

#### Guidelines

- Progressive weight bearing in walker boot after 4 weeks
- Seated shower
- STM of foot/gastroc/solues
- Control swelling with compression/ice/elevation
- Gentle stretching of Achilles ONLY. Avoid PROM ankle DF past neutral position (0 deg DF) until 8 weeks.
- AROM ankle PF & DF to neutral, inversion & eversion below neutral
- 8 weeks, Graduated resisted exercises, t-band strengthening

#### Phase III: Weeks 10-14

#### Goals

- Full weight bearing in regular shoes by 10 weeks.
- Wean out of boot. SLOW progression from CAM boot to shoe weaning 1-2 hours/day.
   Normal to get increased swelling with this transition. Compression stocking, ice, elevation, cane used to unload if needed.
- Swelling control with elevation and modalities as required

#### Guidelines

- Progress ROM at ankle: PF (plantar flexion), inversion/eversion, DF (dorsiflexion) to 0 deg, remainder should be obtained with gait in shoe
- Once tolerated FWB in boot, initiate ONLY in therapy in shoes: Increase ankle/foot strength without push off (stride stance work, tandem balance, ant lunge WS/step ups without push off on surgical side, small squats, bike and general balance activities)
- Manual therapy progression of STM, jt mobs of TC/ST joint of foot as required
- CKC TC jt mobs
- OK to begin with seated heel raises at 11 weeks progressing to supine/prone
- OK to begin swimming and gentle seated bike at 10 weeks

## Phase IV: Weeks 14-16

Goals

- Full weight bearing in regular shoe wear, pain free
- Swelling and pain resolution
- Good proprioception in single leg support

#### Guidelines

- Retro walking on treadmill
- 14 weeks initiate with standing heel raises with progression from DL to SL and eccentrics painfree
- Sitting: active PF exercises, DF to tolerance
- Gentle calf stretches, if needed if have not achieved 10 deg DF by 16 weeks on own
- STM, mobilization as required
- Calf press and leg press
- Proprioceptive exercises
- Single leg support
- Progress to wobble board
- Gait retraining
- Swimming
- Stepper
- Eccentric drops
- Progress to advance dynamic drills 16 + weeks
- hopping skipping progress to sport specific drills 16 + weeks

#### Phase V: Week 16+

#### Goals

Full lower extremity strength and maximum function

#### Guidelines

- Work or sport specific activity
- Work to control arch
- Strength training through running; band work; heel rise
- Progression from double to single heel rise strengthening

## Phase VII: Weeks 26

- Return to competitive sport
- Single heel rise and single leg hop intact

Remember, it may take 6 months to a year to achieve equal single heel rise!