

## Achilles Tendon Non-Operative Protocol

**Dr. Scott M. Holthusen**

**Matt Lund, PA-C**

This protocol provides a general guideline for recovery and progression of rehabilitation according to specified time frames. Specific changes in the program will be made by the physician as appropriate for the individual patient. It may take up to a year to make full recovery, and it is not unusual to have intermittent pains and aches during that time.

**\*\*\*Please fax initial assessment and subsequent progress notes directly to Dr. Holthusen at (952) 442-2029.**

### Phase 1: Day 1-9

#### Goals

- Control swelling and pain with elevation and activity modification

#### Guidelines

- Non weight bearing with crutches or walker
- Hanging equinus cast or CAM boot with 2cm heel lift
- Education: surgery, anatomy, healing time, rehab phases
- Encourage ADLs (activities of daily living) as much as possible
- Hip AROM: lying and standing
- Knee AROM: lying and standing

### Phase 2: Day 10-27

#### Goals

- Begin Physical therapy
- Active dorsiflexion to neutral, passive plantar flexion (sit with foot hanging, allow foot to drop) actively dorsiflex to neutral only
  - Inversion/eversion in less than neutral- 5 minutes every hour
- Modalities to control swelling/promote healing

#### Guidelines

- Non weight bearing in CAM boot with 2 cm heel lift
- Knee/Hip exercises as appropriate
- NWB fitness/cardio

### Phase 3: 4-5 Weeks

#### Goals

- Continue to progress active ROM with physical therapy
- Gradual increase of ADLs

#### Guidelines

- Continue non weight bearing in CAM boot - remove 1<sup>st</sup> part of heel lift
- Continue all other exercises/modalities as above
- Toe flexion/extension
- Stretching: glut max, glut med, piriformis, hamstring gentle, rectus femoris
- Core exercises:
  - Abdominal recruitment
  - Bridging on ball with feet lightly against wall
  - Ball reach

### Phase 4: 6-7 Weeks

#### Goals

- Begin weight bearing progression in CAM boot
- Continue other exercises/modalities as previously
- Increase core, hip, and knee Strength

#### Guidelines

- Remove second portion of heel lift
- Start WB at 20 pounds and progress every 3 days by 20# - wean off crutches when full WB
- Continue boot/night splint

### Phase 5: 8-11 Weeks

#### Goals

- Transition into regular shoe wear with small heel lift
  - May discontinue lift once approved through PT

#### Guidelines

- Weight bearing as tolerated in shoes
- Light weight resistance band ROM
- Static single-leg stance balance exercises
- Proprioception and gait retraining
- Fitness/Cardio to include WBAT (primarily walking)

## Phase 6: 12-15 Weeks

### Goals

- Increase weight bearing tolerance
- Increase strength through PT and activity progression
- Begin light stretching

### Guidelines

- Continue to progress pre-heel raise strengthening with proprioception/gait/fitness
- Double leg heel raises
- Progress gradually to single leg heel raise by reducing support of contralateral leg

## Phase 7: 16-19 Weeks

### Goals

- Continue to progress strength, proprioception, endurance

### Guidelines

- Single leg heel raises
- Step downs, progress from 2-inch step gradually to 8-inch step
- Progress stretching

## Phase 8: 20-24 Weeks

### Goals

- Increase dynamic WB exercises including plyometric and sports specific training if able to perform 10 step down reps with good form from 6-8 inch step
- Full lower extremity strength
- Progress towards maximum function

### Guidelines

- Progress to advance dynamic drills
  - hopping
  - skipping
  - progress to sport specific drills
- Emphasis on
  - Proprioception: wobble board, Sissel, Fitter
  - Strength training through range
- Running

## Phase 9: 25+ Weeks

### Goals

- Begin higher level sports activities: soccer, basketball, volleyball