

# Achilles Tendon Functional Rehabilitation Protocol

**Timeframes for rehabilitation phases are a guide only and should be adapted to each individual patient's progress and Dr Zilko's orders.**

## WEEKS 0-2

### GOALS

- Control pain and swelling.

### ORDERS

- No physical therapy or ankle ROM.
- Ankle in Achilles boot fixed at 30° PF (plantarflexion) full-time.
- Non weight-bearing with crutches or knee roller.
- Elevate leg to reduce swelling and pain.

## WEEKS 2-4

### GOALS

- Protect tendon.
- Regain some ankle ROM.

### ORDERS

- Ankle in Achilles boot, range set from 20°-30° PF week 2; 15°-30° PF week 3.
- 50% partial weight-bearing with crutches.
- Achilles boot off for pain-free exercises and showering only. Boot on in bed.
- Pain-free gravity-assisted PF; no active PF.
- Active dorsiflexion to -15° with flexed knee.
- Active inversion/eversion below neutral (in plantarflexed position).
- Knee & hip exercises with boot on (no ankle involvement) - eg. leg lifts from sitting, prone, or side-lying position.



- Non-impact fitness/cardiovascular exercises - eg. stationary cycling with one leg, deep-water running in the boot.

## WEEKS 4-6

### GOALS

- Protect tendon.
- Improve ankle ROM and gradual light exercises.

### ORDERS

- Ankle in Achilles boot, range set from 10°-30° PF week 4, 5°-30° PF week 5.
- Full weight-bearing as tolerated in boot.
- Achilles boot off for pain-free exercises and showering only. Boot on in bed.
- Pain-free active plantarflexion (no resistance) and dorsiflexion to neutral.
- Active inversion/eversion resistance exercises (theraband) below neutral.
- Progress hip and knee strengthening in boot – eg. controlled squats, step-ups.
- Gait re-training.

# ACHILLES TENDON FUNCTIONAL REHABILITATION PROTOCOL

## WEEKS 6-8

### GOALS

- Begin light Achilles / calf strengthening.

### ORDERS

- Ankle in Achilles boot, range set from neutral 0° to 30° PF.
- Change to flat-sole for the boot.
- Boot off for exercises and showering only. Boot on in bed at night.
- Graduated calf strengthening exercises – active plantarflexion, progressing to seated calf raises and theraband resistance.
- Continue strengthening inversion/eversion/dorsiflexion to **neutral**.
- Proprioceptive and gait re-training.

## WEEKS 8-12

### GOALS

- Get into normal running shoes.
- Increase anti-gravity Achilles / calf strength.

### ORDERS

- Wean off the boot, moving to running shoes (positive drop only).
- Commence calf stretches and ankle dorsiflexion past neutral.
- Low velocity agility drills; single leg balance; functional movement exercises.
- Commence standing double leg heel raises.
- Cycling/swimming/stairs.
- Avoid flat footwear – eg. thongs or barefeet.

## MONTHS 3-6

### GOALS

- Regain full calf strength, bulk & length.
- Improve endurance and fitness.

### ORDERS

- Progress strength, balance and proprioception.
- Commence standing single leg calf raises and lunges, progress weight as tolerated.
- Progress to light jogging and plyometrics (jumping/hopping) from 4 months if no symptoms, adequate rehab and good calf strength regained.

## MONTHS 6-12

### GOALS

- Return to normal sport and strenuous work.

### MANAGEMENT

- Work/sport specific training.

