

Achilles Tendon Functional Rehabilitation Protocol

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

WEEKS 0-2

GOALS

- Control pain and swelling.
- Protect tendon.

ORDERS

- No physical therapy or ankle ROM.
- Ankle in Achilles boot fixed at 30° PF (plantarflexion) full-time.
- **NON** weightbearing 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, fixed at 30° PF.
- Protective weightbearing with crutches:
 - Week 2-3: 25% body weight
 - Week 3-4: 50% body weight
- 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).
- Pain must be used as guideline - ie if increasing pain, then decrease activity/weightbearing.



- Knee & hip exercises with boot on (no ankle involvement) - eg. leg lifts from sitting, prone, or side-lying position.
- Non-weightbearing fitness/cardiovascular exercises - eg. stationary cycling with one leg.

WEEKS 4-6

GOALS

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

ORDERS

- Ankle in Achilles boot, range set from 20°-30° PF week 4, 10°-30° PF week 5.
- Protective weightbearing with crutches:
 - Week 4-5: 75% body weight
 - Week 5-6: 100% body weight
- Achilles boot off for pain-free exercises and showering only. Boot **on** in bed.
- Pain-free active plantarflexion (no resistance) and dorsiflexion to neutral (no further).
- Active inversion/eversion resistance exercises (theraband) below neutral.
- Progress hip and knee strengthening in boot – eg. controlled squats, step-ups.

ACHILLES TENDON FUNCTIONAL REHABILITATION PROTOCOL

WEEKS 6-8

GOALS

- Protect tendon.
- Improve ankle ROM.
- Begin light Achilles / calf strengthening.

ORDERS

- Ankle in Achilles boot, range set from neutral 0° to 30° PF.
- Full weightbearing as tolerated.
- 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 8-10

GOALS

- Progress range of movement & proprioception.
- Increase anti-gravity Achilles / calf strength.

ORDERS

- Ankle in Achilles boot, range set from neutral 0° to 30° PF, for all weightbearing.
- Can sleep out of boot at night.
- Commence gentle calf stretches and ankle dorsiflexion past neutral (no forceful stretch).
- Do not allow ankle to dorsiflex past neutral during strengthening.

WEEKS 10-12

GOALS

- Wean out of boot (usually over 3-7 days).
- If RIGHT Achilles (automatic car) or LEFT Achilles (manual car), can drive once comfortably 100% weightbearing out of boot.

- Progress range of movement & proprioception.
- Increase anti-gravity Achilles / calf strength.

ORDERS

- Wean off the boot, moving to running shoes (positive drop only).
- Low velocity agility drills; single leg balance; functional movement exercises.
- Commence standing double leg heel raises.
- Commence stationary bike, elliptical trainer, treadmill walking as tolerated.
- Avoid flat footwear – eg. thongs or barefeet.
- **This is the DANGER phase for re-rupture** - ensure patient diligent with ADLs/exercises/walking terrain to avoid re-rupture.

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.

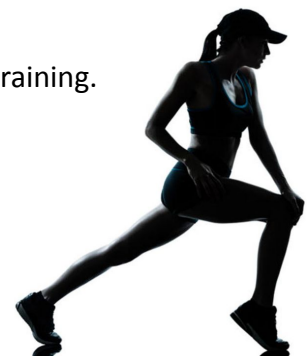
MONTHS 6-12

GOALS

- Return to normal sport and strenuous work.

MANAGEMENT

- Work/sport specific training.



Copyright 2022 Dr Simon Zilko. All rights reserved.