Achilles Tendon Repair Post-Op Rehabilitation Protocol

Damien Richardson, MD, MPH, FAAOS

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.

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!

PHASE I: WEEKS 1-2

Goals

- Rest and recovery from surgery
- Control swelling and pain
- Gradual increase of ADL (activities of daily living)

Guidelines

- Will be in a shortleg splint 0-2 weeks and NWB (non weight bearing)
- Will use crutches or a walker with CAM boot and wedges at 2-4 weeks post op
- Start with 3 wedges in boot and remove 1 wedge per week leaving last wedge
- Sleep in CAM boot with wedges unil 4 weeks post op
- Weight bearing as tolerated in CAM boot with 1 wedge post op 4-8 weeks
- Early motion is safe of foot/ankle as long as done below neutral with no dorsiflexion
- Encourage ADL as much as possible
- Rest and elevation between ADL
- Hip AROM: lying and standing
- Knee AROM: lying and standing

PHASE II: WEEKS 2-8

Goals

- Maintain hip and knee ROM
- Improve core, hip and knee strength
- Safe use of crutches or FWW

Guidelines

- Shower when wound cleared by orthopedic surgeon
- Partial WB with crutches/FWW in CAM walker boot with 3 wedges
- Remove 1 wedge per week starting week 3 until down to 1 wedge
- Sleep with boot on until 4 weeks post op
- Only motion of ankle/foot/subtalar/toes down with foot below neutral. No dorsiflexion past 90 degrees until 8 weeks post op
- Massage of foot to decrease edema (light massage toes towards ankle
- Control swelling with elevation
- Core exercises:
 - Abdominal recruitment
 - Bridging on ball with feet lightly against wall
 - Ball reach
- Toe flexion/extension
- Hip: AROM (active range of motion)
 - Strength: clams, sidelifts, gluteus maximus, SLR (straight leg raise)
- Knee: AROM
 - Strength: SLR, side lifts, prone leg lifts
 - Theraband press progress to leg press machine at 21 days
- Stretching: glut max, glut med, piriformis, hamstring gentle, rectus femoris

PHASE III: WEEKS 8-10

Goals

- Dorsiflexion past neutral started but slow and not agressive
- Transition out of CAM walker boot to stiffsole rocker bottom shoe (ex. Hoka One Bondi) while using peel away heel lift (when comfortable).
- Increase core, hip, and knee strength

Guidelines

- Swelling control with elevation and modalities as required
- AROM at ankle: PF (plantar flexion), inversion/eversion, DF (dorsiflexion) to first point of resistance
- Manual mobilization of foot as required
- Gentle mobilization subtalar
- Continue core, hip and knee strengthening (do exercises with brace on)
- Try to control knee hyperextension (knee hyperextends to compensate for lack of DF at ankle)

PHASE IV: WEEKS 10-12

Goals

• Increase DF with goal to naturally progress to equal of non-operative limb

Guidelines

- Stationary bicycle: start to add tension
- Sitting: active PF exercises, DF to tolerance

PHASE V: WEEKS 13-16

Goals

- FWB when comfortable/no swelling or pain
- Keep peel-away heel lift in shoe until 16 weeks post op
- Near 75% strength
- Good proprioception in single leg support

Guidelines

- Increase WB tolerance
- Theraband: inversion/eversion, DF
- ROM exercises:
 - Gentle calf stretches
 - Manual mobilization as required
- Calf press
- Leg press
- Proprioceptive exercises
 - Single leg support
 - Progress to wobble board, Sissel, fitter
- Gait retraining
- Swimming
- Stepper
- Eccentric drops
- Progress to advance dynamic drills 16 + weeks
 - Hopping
 - Skipping
 - Progress to sport specific drills 16 + weeks

PHASE VI: WEEK 16+

Goals

- Full lower extremity strength
- Maximum function
- Remove peel-away heel lift when ready

Guidelines

- Work or sport specific activity
- Work to control arch
- Emphasis on
 - o 1. Proprioception: wobble board, sissel, fitter
 - o 2. Strength training through range running

PHASE VII: WEEKS 24+

- Single limb heel rise
- Begin higher impact activity with return to competitive sport if able to do single limb heel rise and single leg hops (10 times) on operative limb with good balance, cadence, and strength compared to non-operative limb

Note: Risk of re-rupture if jumping down from a height