

PT PROTOCOL: ACHILLES TENDON REPAIR

I. Phase I (Max protection phase) Week 0-2

Goals: Protect healing tissue
 Decrease pain and inflammation
 Retard muscular atrophy
 Control weight bearing forces

Splint – in splint at all times first 2 weeks

Weight bearing – Non-weight bearing with 2 crutches first 2 weeks

II. MODERATE PROTECTION PHASE (week 3-6)

Goals: Protect healing tissue
 Control stresses applied to healing tissues
 Decrease pain and inflammation
 Retard muscular atrophy
 Control weight bearing forces

Weight Bearing – Partial weight bearing with heel wedges with 2 crutches, gradually wean to full WBAT in boot with wedges by 4-5 weeks

ROM – No passive range of motion first 6 weeks. Particularly, no stretching into dorsiflexion
When taken out of splint, begin active ROM exercises.

Strength Exercises –

- No strengthening first 2 weeks
- Begin submaximal isometrics at 2 weeks
- Hip adduction/abduction
- Straight leg raises flexion
- Bicycle (in boot)
- Initiate ankle inversion/eversion below neutral
- Seated balance on BAPS board
- Active plantar and dorsi flexion to neutral

III. BEGINNING MOTION AND STRENGTHENING PHASE (week 7-12)

Goals: Progress to full motion
 Advances proprioceptive drills
 Increase strength, power, and endurance
 Gradually initiate sporting activities

Exercises:

Week 4-8

- Gradually d/c heel lift, progress to WBAT
- Begin very slow dorsiflexion stretching
- Graduated resistance exercises (OKC, CKC, functional)
- Proprioceptive and gait retraining
- Fitness/cardio to include WBAT

Week 8-12

- Gradually wean boot (plan to be boot free by week 12, ok if return to crutch/cane temporarily when coming out of boot at first)
- Continue to progress ROM, strength, proprioception

IV. ADVANCED MOTION AND STRENGTHENING (week 13-20)

Week 12-14

- 4-way Theraband isotonic (dorsiflexion, plantarflexion, eversion, inversion)
- Seated proprioceptive drills
- Leg press
- Knee extension
- Vertical squats (0-35 degrees)

Week 14-16

- Vertical squats (0-60 degrees)
- Side and front lunges
- Lateral step-ups

Week 16-18

- Standing proprioceptive drills
- Stair climbing machine

Pool Program:

- Swimming week 12-14
- Fast paced walking week 14-16
- Running in pool week 16-18

Continue strengthening exercises

- Theraband strengthening inversion/eversion, dorsi/plantarflexion
- Towel gathering
- Light standing toe-calf raises
- Bicycle

- Stair climbing machine
- Vertical squats
- Front lunges
- Proprioceptive training

Initiate plyometric program (week 16-18)

Initiate running program (week 18-20)

Initiate agility drills

Initiate sport specific training and drills (week 20-22)

V. RETURN TO ACTIVITY PHASE (month 5-7)

Goals: Continue to increase strength, power, and endurance of lower extremity
Gradual return to sport activities

Exercises: Continue strengthening program
Continue closed chain strengthening program
Continue plyometric program
Continue running and agility program
Accelerate sport specific training and drills