

Postoperative Rehabilitation Following Achilles Tendon Repair (Accelerated)

I. Immediate Protection Phase (week 0-4)

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

Splint/Brace – Posterior splint (foot positioned in 15-20 degrees of plantarflexion) worn all day and night, Remove posterior splint, progress to boot at week 3, Sleep in boot

Weight bearing – Non-weight bearing with 2 crutches first 8 weeks
Progress to partial weight bearing at 3 weeks with 2 crutches (use heel lift)

ROM – No passive range of motion first 8 weeks, may begin range of motion in pool once incision is fully healed.
At 3 weeks begin active ROM exercises, No stretching into dorsiflexion

Strength Exercises –

- No strengthening first 2 weeks
- Begin submaximal isometrics at 2 weeks
- Hip abduction
- Hip adduction
- Straight leg raises flexion
- Bicycle (in boot)

II. Moderate Protection Phase (week 4-8)

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 4-6 weeks

- Hip adduction
- Straight leg raises flexion
- Bicycle
- Initiate ankle inversion/eversion
- Seated balance on BAPS board

III. Advanced Motion and Strengthening Phase (week 12-20)

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

Exercises:

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)

IV. 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