

## 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 18-20)

Initiate running program (week 20-22)

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