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## Postoperative Rehabilitation Following Achilles Tendon Repair

### I. IMMEDIATE PROTECTION PHASE (week 0-8)

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

**Weight bearing** – Non-weight bearing with 2 crutches first 8 weeks.

**ROM** – No passive range of motion first 8 weeks may begin range of motion in pool once incision is fully healed.

#### **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. INTERMEDIATE PHASE (week 8-12)

Goals: Protect healing tissue  
Retard muscular atrophy  
Progress weight bearing tolerance  
Begin light proprioceptive drills

**Weight bearing** – Begin PWB with 2 crutches in walking boot with 5/8" heel lift insert. Gradually increase to FWB at week 12.

**ROM** – Begin passive dorsiflexion, plantarflexion, inversion, and eversion

#### **Strengthening Exercises** – Continue above exercises

- Submaximal isometrics
- Hip abduction
- 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  
Advance proprioceptive drills  
Increase strength, power, and endurance

#### **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