

# ***Patella Tendon Repair***

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**PRISMA**  
HEALTH SM

## **Phase I Maximum Protection (Weeks 0-6)**

### **Weeks 0 – 2**

- Brace locked in full extension for 4 weeks
- Partial weight bearing for 1 week then progress to WBAT
- Ice, compression, and modalities to reduce pain and inflammation
- Patellar mobilizations
- Begin gentle submaximal quadriceps setting
- Short but frequent bouts of ROM and quadriceps activation 3-5x/day

### **Weeks 2-4**

- Reduce inflammation
- Weight Bearing as Tolerated
- Continue patella mobility
- Exercise Progression
  - Gait training
  - Extension - heel props for full extension
  - Quadriceps setting using NMES as needed
  - Multi-plane straight leg raises
  - Bilateral calf raises

### **Weeks 4-6**

- Increase Flexion by 30° each week until you get to 90°
- Open and closed multiplane hip strengthening
- Proprioception drills

## **Phase II Progressive Stretching & Early Strengthening (Wks 6–12)**

### **Goals**

- Full knee extension/hyperextension
- Knee flexion – progress gradually to full
- Normalize gait mechanics
- Normalize patellofemoral joint and scar mobility

### **Exercise Progression**

- Extension – heel props and prone hangs as needed
- Flexion – end range heel slides and progressive quadriceps stretching
- Bilateral squat / leg press progression – focus on proper alignment with gradually increasing depth
- Multi-plane open and closed kinetic chain hip strengthening
- Step-up progression – focus on proper alignment and eccentric control
- Controlled movement series
- Hamstring activation with bridge on floor, ball or box
- Hamstring curls on machine or single leg RDL's

- Progress to unilateral heel raise off the floor then off a step
- Proprioception drills

### **Cardio Exercise**

- Stationary Biking
- Treadmill/outdoor walking with focus on proper gait mechanics
- Arc Trainer
- Elliptical
- Swimming – light flutter kick

### **Recommended Loading**

- ROM: 2-3x/day
- Strength: 5x/week on straight leg raises and cord kicks. 3x/week on closed chain progression
- Cardiovascular: 20-30 mins 5x/week with low to moderate intensity

## **Phase III – Advanced Strengthening & Endurance (Wks 12-16)**

### **Goals**

- Control inflammation with increasing loads
- Full knee flexion and extension with terminal stretch
- Progressive strengthening
- Increase muscular endurance

### **Movement Prep**

- Foam Roller
- Controlled movement series

### **Exercise Progression**

- Weighted squat progression – gradually increase depth and resistance
- Leg press, hamstring curls, RDL's, single leg calf raises
- Single leg squat/step-up/lunge progression (dips, retro, walk and split), focus on eccentric control and alignment. Slow and gradual progression with increasing depth
- Monster walks

### **Core Program**

- Front plank – full, may advance to alternating leg lift
- Bridge – marching or single leg
- Side plank – full
- Dead bug progression
- Quadruped alternating arm-leg

### **Cardio Exercise**

- Stationary Biking
- Treadmill/outdoor walking with focus on proper gait mechanics
- Arc trainer or elliptical
- Stadium stair walking

### **Sport Specific Activity Progression**

- Outdoor biking: week 12
- Shallow water pool running: week 8-10
- Swimming free style: week 8-10
- Higher intensity interval work with CV program – week 12