

## **Patellar Tendon Fenestration**

### **Phase I – Maximum Protection (Weeks 0 to 6):**

#### **0 to 2 weeks:**

- Brace locked in full extension for 6 weeks
- Partial weight bearing for 2 weeks
- Ice and modalities to reduce pain and inflammation
- Aggressive patella mobility drills
- Gradual progression to full flexion and extension
- Begin submaximal quadriceps setting, focusing on VMO function
- Begin multi-plane open kinetic chain straight leg raising program

#### **Weeks 2 to 4:**

- Weight bearing as tolerated; progressing off of crutches
- Continue with inflammation control
- Continue with aggressive patella mobility
- Full range of motion
- Continue with quadriceps setting and multi-plane straight leg raising
- Begin low resistance stationary biking
- Begin pool program when incisions healed, focusing on ROM

#### **Weeks 4 to 6:**

- Full weight bearing
- Continue with ice and aggressive patella mobility
- Increase resistance with straight leg raising program
- Advance pool program to include light resistance work

### **Phase II – Progressive Range of Motion and Early Strengthening (Weeks 6 to 12):**

#### **Weeks 6 to 8:**

- Full weight bearing
- Open brace to 45°- 60° of flexion week 6, 90° at week 7
- Continue with swelling control and patella mobility
- Normalize gait pattern
- Continue with multi-plane straight leg raising
- Initiate open kinetic chain progressing to closed kinetic chain multi-plane hip strengthening
- Begin closed kinetic chain strengthening program focusing on quality VMO function
- Advance intensity on stationary bike
- Initiate proprioception drills
- Begin treadmill walking program and/or elliptical trainer as tolerated

#### **Weeks 8 to 10:**

- Wean out of brace
- Continue with patella mobility drills
- Normalize gait pattern
- Progress open and closed kinetic chain program
- Increase intensity of cardiovascular program

**Weeks 10 to 12:**

- Full ROM
- Aggressive terminal quadriceps stretching
- Advance open and closed kinetic chain strengthening
- Advance proprioception drills

**Phase III – Progressive Strengthening (Weeks 12 to 16):**

**Weeks 12 to 16:**

- Advance open and closed kinetic chain strengthening
- Increase intensity on bike, treadmill, and elliptical trainer
- Increase difficulty and intensity on proprioception drills
- Begin gym strengthening: leg press, hamstring curls, ab/adduction; avoid lunges and knee extensions
- Begin multi-directional functional cord program
- Begin pool running program

**Phase IV – Advanced Strengthening and Functional Drills (Weeks 16 to 20):**

**Weeks 16 to 20:**

- May begin leg extensions; 30° to 0° progressing to full ROM as patellofemoral arthrokinematics normalize
- Advance pool running program advancing to land as tolerated

**Phase V – Plyometric Drills and Return to Sport Phase (Weeks 20 to 24):**

**Weeks 20 to 24:**

- Advance gym strengthening program
- Progress running/sprinting program
- Begin multi-directional field/court drills
- Begin bilateral progressing to unilateral plyometric drills
- Follow-up appointment with physician
- Sports test for return to competition