

## Rehabilitation Protocol: Patellar Tendon Rupture

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Diagnosis: \_\_\_\_\_

Date of Surgery: \_\_\_\_\_

### Phase I: Immobilization and Rehabilitation (4-13 days)

- **Goals**

- Control pain and inflammation
- Maintain patellar mobility
- Maintain hamstring strength of the ipsilateral leg and lower extremity strength of the contralateral leg
- Active knee flexion to 45° and passive knee extension to 0°

- **Intervention:**

- Crutch training with toe-touch weight-bearing
- Ice and elevation
- Isometric ipsilateral hamstring exercise, contralateral LE strengthening
- Gentle medial/lateral patellar mobilization (~25%)
- AROM, AAROM and PROM
- Hinged knee brace locked in extension

### Phase II: Immobilization and Rehabilitation (2-4 weeks)

- **Goals**

- Control pain and inflammation
- Begin weight-bearing
- Maintain patellar mobility
- Active flexion to 90° and passive knee extension to 0°
- Maintain ipsilateral hamstring and contralateral LE strength
- Begin ipsilateral quadriceps retraining

- **Intervention**

- Crutch training with partial weight-bearing (25-50%)
- Ice and elevation
- Isometric ipsilateral hamstring exercise, contralateral LE strengthening
- Gentle medial/lateral patellar mobilization (~25%)
- AROM, AAROM and PROM
- Hinged knee brace locked in extension
- Ipsilateral quadriceps sets (NO straight leg raises)

### Phase III: Immobilization and Rehabilitation (4-6 weeks)

- **Goals**

- Control pain and inflammation
- Progress weight-bearing (possibly discontinue crutch use)
- Active flexion progressed as tolerated and passive extension to 0°
- Maintain patellar mobility
- Maintain ipsilateral hamstring and contralateral LE strength
- Continue ipsilateral quadriceps retraining

- **Intervention**

- Progress to weight-bearing as tolerated, may discontinue crutch use if good quadriceps control is acquired
- Gait training

- Ice and elevation
- Isometric ipsilateral hamstring exercise, contralateral LE strengthening
- Gentle medial/lateral patellar mobilization (~25%)
- AROM, AAROM and PROM
- Hinged knee brace locked in extension
- Ipsilateral quadriceps sets (NO straight leg raises)

**Phase IV: Immobilization and Rehabilitation (6-12 weeks)**

• **Goals**

- Control pain and inflammation
- Progress to full active ROM
- Maintain patellar mobility
- Maintain ipsilateral hamstring and contralateral LE strength
- Continue ipsilateral quadriceps retraining

• **Intervention**

- Weight-bearing as tolerated
- Gait training
- Hinged knee brace locked in extension until good quadriceps control and normal gait are obtained
- Ice and elevation
- Isometric ipsilateral hamstring exercise, contralateral LE strengthening
- Gentle medial/lateral patellar mobilization (~50%)
- AROM
- Ipsilateral quadriceps strengthening (straight leg raises without resistance and stationary cycling at 8 weeks)

**Phase V: Rehabilitation (12-16 weeks)**

• **Goals**

- Complete weight-bearing
- Progress ipsilateral quadriceps strength
- Begin neuromuscular retraining

• **Intervention**

- Gait Training
- No immobilization
- Ipsilateral quadriceps strengthening
- Proprioception and balance activities (including single leg support)

**Phase VI: Rehabilitation (16-24 weeks)**

• **Goals**

- Begin running
- Sport/job specific training

• **Intervention**

- Progress program as listed for Phase IV, with sport or job specific training

**Phase VII: Rehabilitation (> 6 months)**

- May begin jumping and contact sports when ipsilateral strength is 85-90% of contralateral extremity

**Comments:**

**Frequency:** \_\_\_\_\_ times per week

**Duration:** \_\_\_\_\_ weeks

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_