Rehabilitation Protocol: Patellar Tendon Rupture

Name: ________________________________  Date: ____________________

Diagnosis: ________________________________  Date of Surgery: _____________

- Phase I: Immobilization and Rehabilitation (4-13 days)
  - Goals
    o Control pain and inflammation
    o Maintain patellar mobility
    o Maintain hamstring strength of the ipsilateral leg and lower extremity strength of the contralateral leg
    o Active knee flexion to 45° and passive knee extension to 0°
  - Intervention:
    o Crutch training with toe-touch weight-bearing
    o Ice and elevation
    o Isometric ipsilateral hamstring exercise, contralateral LE strengthening
    o Gentle medial/lateral patellar mobilization (~25%)
    o AROM, AAROM and PROM
    o Hinged knee brace locked in extension

- Phase II: Immobilization and Rehabilitation (2-4 weeks)
  - Goals
    o Control pain and inflammation
    o Begin weight-bearing
    o Maintain patellar mobility
    o Active flexion to 90° and passive knee extension to 0°
    o Maintain ipsilateral hamstring and contralateral LE strength
    o Begin ipsilateral quadriceps retraining
  - Intervention
    o Crutch training with partial weight-bearing (25-50%)
    o Ice and elevation
    o Isometric ipsilateral hamstring exercise, contralateral LE strengthening
    o Gentle medial/lateral patellar mobilization (~25%)
    o AROM, AAROM and PROM
    o Hinged knee brace locked in extension
    o Ipsilateral quadriceps sets (NO straight leg raises)

- Phase III: Immobilization and Rehabilitation (4-6 weeks)
  - Goals
    o Control pain and inflammation
    o Progress weight-bearing (possibly discontinue crutch use)
    o Active flexion progressed as tolerated and passive extension to 0°
    o Maintain patellar mobility
    o Maintain ipsilateral hamstring and contralateral LE strength
    o Continue ipsilateral quadriceps retraining
  - Intervention
    o Progress to weight-bearing as tolerated, may discontinue crutch use if good quadriceps control is acquired
    o Gait training
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 (~25%)
  - AROM, AAROM and PROM
  - Ipsilateral quadriceps sets (NO straight leg raises)

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: ___________________________