Ronak M. Patel, MD

Extensor Mechanism Repair
Quad Tendon, Patellar Tendon, Patella Fracture
Rehabilitation Guidelines

Phase I for Immobilization and Rehabilitation: 0-2 weeks
GOALS:
- Control pain and inflammation
- Maintain patellar mobility
- Maintain hamstring strength of the ipsilateral leg and lower extremity strength of the contralateral leg

Intervention:
- Crutch training with weight-bearing as tolerated (WBAT) in full extension only
- Ice and elevation
- Isometric ipsilateral hamstring exercise, contralateral LE strengthening
- Gentle medial/lateral patellar mobilization (~25%)
- Hinged knee brace locked in extension
- Ankle pumps/Quad Sets

Phase II for Immobilization and Rehabilitation: 2-6 weeks
GOALS:
- Control pain and inflammation
- Weight-bearing as tolerated (WBAT) in full extension only
- Maintain patellar mobility
- Active flexion to 90° and passive knee extension to 0°
- Maintain ipsilateral hamstring and contralateral LE strength
- Continue ipsilateral quadriceps retraining

Intervention:
- WBAT in full extension
- 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 during WB, unlock for exercises
- Ipsilateral quadriceps sets (NO straight leg raises)

Phase III for 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 with brace unlocked
  o Maintain brace until good quadriceps control and normal gait are obtained, then can discontinue
• Gait training
• 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 IV for 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 V for Rehabilitation: 16-24 weeks**

GOALS:
• Begin running
• Sport/Job specific training

Intervention:
• Progress program as listed with sport or job specific training

**Phase VI for Rehabilitation: >6 months**
• May begin jumping and contact sports when ipsilateral strength is 85-90% of contralateral extremity