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Rehabilitation Protocol: Patellar Tendon Rupture

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
 - o contralateral leg
 - o Active knee flexion to 45° and passive knee extension to 0°

• Intervention:

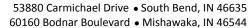
- o Crutch training with toe-touch weight-bearing
- o Ice and elevation
- o Isometric ipsilateral hamstring exercise, contralateral LE strengthening
- o Gentle medial/lateral patellar mobilization (~25%)
- o AROM, AAROM and PROM
- o Hinged knee brace locked in extension

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)



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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 0o
- 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
- o control is acquired
- o Gait training
- 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)

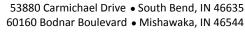
Phase IV: Immobilization and Rehabilitation (6-12 weeks)

• Goals

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

Intervention

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



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Phase V: Rehabilitation (12-16 weeks)

- Goals
 - o Complete weight-bearing
 - o Progress ipsilateral quadriceps strength
 - o Begin neuromuscular retraining
- Intervention
 - o Gait Training
 - o No immobilization
 - o Ipsilateral quadriceps strengthening
 - o Proprioception and balance activities (including single leg support)

Phase VI: Rehabilitation (16-24 weeks)

- Goals
 - o Begin running
 - o Sport/job specific training
- Intervention
 - o 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