



EXTENSOR MECHANISM (QUAD/PATELLAR TENDON) REPAIR

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****YOU NEED TO HAVE YOUR PHYSICAL THERAPY SCHEDULED TO START TWO WEEKS AFTER SURGERY. THIS IS EXTREMELY IMPORTANT.****

** Please keep in mind, these are guidelines only. Other than specifics regarding slingwear and specific limitations, I trust your expertise to provide the best treatment strategy for my patients** if there are any questions don't hesitate to contact myself or my team

Phase 1--Maximum Protection (Weeks 0 to 6)

- Weeks 0-4:
 - Brace locked in full extension for 6 weeks
 - 50% weight-bearing for 3 weeks, 75% weeks 3-4, wean off crutches at 4 weeks
 - Ice and modalities to reduce pain and inflammations
 - Patella and patella tendon mobility drills
 - ROM→ 0-*** knee flexion, increase 10°/week until full ROM is achieved
- Weeks 4-6:
 - FWB
 - Continue patella/patella tendon mobility

Phase 2--Progressive ROM and Early Strengthening (Weeks 6 to 12)

- Weeks 6-8:
 - FWB
 - Open brace 0-90°
 - Continue with swelling control and patella mobility
 - Gradually progress to full ROM
 - Begin quadriceps setting
 - Begin multi-plane SLR and closed-chain strengthening program focusing on quality VMO function
 - Initiate open-chain progressing to closed-chain multi-plane hip strengthening
 - Normalize gait pattern
 - Begin stationary bike
 - Initiate pool program

- Weeks 8 to 10:
 - Wean out of brace
 - Continue with patella mobility drills
 - Normalize gait pattern
 - Restore full ROM
 - May begin short arc quadriceps contraction 0-30°
 - Progress open and closed-chain program from bilateral to unilateral
 - Increase intensity on stationary bike
 - Begin treadmill walking program
- Weeks 10-12:
 - Full ROM
 - Terminal quadriceps stretching
 - Advance unilateral open and closed-chain strengthening
 - Initiate proprioception drills
 - May introduce elliptical trainer

Phase 3--Progressive Strengthening (Weeks 12 to 16)

- Advance open and closed-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

Phase 4--Advanced Strengthening and Functional Drills (Weeks 16 to 20)

- May begin leg extensions 30-0°
- Begin pool running program advancing to land as tolerated

Phase 5--Plyometric Drills and Return to Sport Phase (Weeks 20 to 24)

- Advance gym strengthening
- 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