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Worker's Compensation Arthroscopy/Sports Medicine Extremity Trauma Joint Replacement Surgery

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Quadriceps Tendon Tear Rehabilitation Protocol

The following is a protocol for post-operative patients following quadriceps tendon repair. The primary goal of this protocol is to protect the repair while steadily progressing towards and ultimately achieving preinjury level of activity. Please note this protocol is a <u>guideline</u>. Achieving the criteria of each phase should be emphasized more than the approximate duration. If a patient should develop an increase in pain or swelling or decrease in motion at any time, activity should be decreased until problems are resolved.

PHASE I - Protect

Week 0-2

- Brace locked in full extension for 6 weeks except for passive range of motion exercises
- Partial weight bearing for two weeks with crutches
- Ice and modalities to reduce pain and inflammation
- Aggressive patella mobility drills
- Range of motion 0 to 30 degrees knee flexion
- Begin submaximal quadriceps strengthening

Weeks 2-4

- Weight bearing as tolerated progressing off crutches
- Continue previous exercises
- Progress range of motion 0 to 60 degrees

Week 4-6

- Full weight bearing
- Range of motion
- Continue previous exercises
- Modalities for pain and swelling
- Begin with AROM/Progress to AAROM as tolerated
 - → Heel Slides
 - → Wall Slides
 - → Stationary Bike
 - → Include prone hangs to maintain full extension ROM
- Patellar mobilizations
- Stretching for hamstrings, iliotibial band, and gastroc-soleus complex
- Strengthening
 - → Quadriceps sets
 - → Straight leg raises in all planes
 - → Heel Raises
 - → Mini squats
- Russian stimulation to quadriceps/VMO musculature for muscle re-education.

PHASE II - Strengthening

Week 6-8

- Continue to progress to full ROM
- Progress with strengthening/CKC activities
 - → Standing TKEs with Thera-Band
 - → Stool scoots-forwards and backwards
 - → Seated hamstring curls with Thera-Band
 - → Wall sits/Swiss ball squats
 - → Bilateral leg press (45° 0°)
 - → Single leg balance

Week 8-12

- Normalize gait pattern
- Progress with strengthening/Quadriceps eccentric strengthening
 - → Bilateral leg press (90° 0°)
 - → Lateral step-ups (begin with 2" step)
 - → Unilateral leg press (90° 0°)
 - → Multi Hip machine
 - → Hamstring Curls
 - → Progress balance and proprioception exercises
 - → Lunges
 - → Elliptical trainer
 - → Stairmaster

Week 12-16

- Focus on progressing with CKC concentric/eccentric quadriceps strengthening and conditioning.
- May begin light OKC quadriceps strengthening
- Knee Extensions (light weight/many reps)

Return to Activities:

Return to full activities on average 4-6 months per Dr. Collard and approved by physical therapist.