

# SPECTRUM MEDICAL

Surgical Date: \_\_\_\_\_

Rehab Start Date: \_\_\_\_\_

Patellar Tendon Repair Protocol

## PATELLAR/QUAD TENDON REPAIR

### Preoperative Guidelines

- Restore full AROM
- Reduce edema
- Restore balance
- Restore strength
- Educate patient on:
  - Post-op exercises
  - Use of crutches (level and stairs)
  - Post-op precautions: importance of extension, bed positioning, brace (locked at 0 degrees for ambulation), avoid active quads exercises 1<sup>st</sup> 6 weeks, avoid flexion > 90 degrees, monitor swelling

**Note:** Exercise prescription is dependent upon the tissue healing process and individual functional readiness in all stages. If any concerns or complications arise regarding the progress of any patient, physical therapy will contact the orthopedist.

### Phase I (Weeks 0-6)

- **Bracing:** the surgeon will recommend what ROM the patient can begin with, then progress each week per surgeon
- Ambulate with crutches WBAT. Ensure heel-toe gait, not flexed knee
- May d/c crutches when good quad control (normal gait, SLR x 30 no lag)
- Stair education
- Weight shifting/Well-leg Theraband (light)/easy balance activities/double BAPS with brace on
- **Well** leg bicycle
- Prone hangs and/or supine extension with bolster to 0 degrees extension
- Prone active knee flexion (not to exceed 90 degrees)
- **Passive** extension. No active quad extension
- Quad sets (e-stim. if patient unable to perform independently)
- SLR ONLY when no lag (monitor). May need e-stim.
- HS/gastroc/soleus stretch
- Patellar mobilization
- Begin scar massage after incision site sloughs and scar is formed
- Double leg calf raises (brace on)
- Ice after exercises

**GOALS:** AROM 0-90, normal patellar mobility, proper heel-toe gait

### Phase II (Weeks 7 to 8)

- D/C brace when quad strength sufficient and gait is normal
- Stationary bike
- Treadmill: Forward and backward...progress for endurance
- Progress to full AROM
- Begin low resistance closed chain resisted quad exs: Leg Press/Total Gym, mini-squats, partial wall sits for time (goal: 3 minutes)
- Progress balance/proprioception activities: single leg balance, cone walking, rocker board, well leg tubing, etc.
- Single leg calf raises
- Pool walking/quad strengthening/1/2 squats/deep water jog

**GOALS:** AROM 0-110 degrees, single leg balance 30 sec, normal gait

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## Phase III (Week 8-12)

- Bike and Stairmaster/cross-trainer
- Continue treadmill progression
- ROM as needed
- Step-ups: anterior and lateral, slow and controlled
- Progress other closed chain quad exercises as tolerated: lateral step downs, leg press, etc.
- Progress proprioception/balance activities as tolerated (i.e.: one leg stance plyoback, eyes closed balancing, Fitter, etc)
- Easy jog on mini-trampoline
- Progress in pool therapy/pool running/kickboard/hopping

**GOALS: Full ROM, walk 2 miles at 15 min/mile pace**

## Phase IV (3-6 Months)

- When jogging gait is normal, quad strength is 5/5 and can hop 10 times on affected limb without pain, begin straight-line walk/jog progression on flat surface (if cleared by physician).
- Gym program
- Begin easy plyometrics and progress proprioception/balance (BAPS, hopping, shuffles, carioca, etc, jump rope)
- Begin sports specific drills/cutting/figure 8, etc

**GOALS: Jog 2 miles at 50% normal pace without pain, edema, effusion**

## Phase V (6 Months)

- Continue appropriate previous exercises...
- Home/gym program
- Agility drills/cutting/carioca/lateral shuffle/plyometrics/double hopping...progress to single
- May begin incorporating open chain strengthening as tolerated
- Quad stretch
- Continue running progression
- Progress to sports when able to perform sports-specific activities without pain or limitations (see 6 months goals below)

**4 MONTH GOALS: Run 2 miles at comfortable pace without pain, swelling, or giving away**

**6 MONTH GOALS:**

- No effusion or giving out
- Functional tests at least 90% of opposite leg to clear for sports and
- Discharge (single leg hop and 12 meter hop for time)

**No contact sports until 6 months post-op**