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Date:

**Patient Name:** 

Date of surgery:

Visit per week:

# PHYSICAL THERAPY PRESCRIPTION:

# **QUADRICEPS OR PATELLA TENDON REPAIR**

## **Brace and Weight Bearing Instructions:**

Initial Visit 7 to 10 Days: Dressing change Start P.T. at 2-3 weeks At 0 to 2 weeks you may ambulate with brace locked in extention and partial weight bearing.

May start WBAT with brace locked in extension at week 2.

At 2-3 weeks home E-stim unit (if needed) for quadriceps muscle re-ed.

At 5 weeks typically can open the brace 0-90 degrees with ambulation with crutches, unless otherwise specified.

At 8 weeks to 10 weeks please transition out of the brace.

PRECAUTIONS: Avoid impact loads/sudden activation (eccentric load)

## GOALS:

□ A/AAROM 90-100 degrees by 6 weeks, 0-110 degrees by week 8, 0-130 degrees by week 10, and 0-135 degrees by week 12.

# Week 1-4

No active ROM knee extension.

• PROM knee ext to 0 degrees

- AROM/AAROM knee flexion very gently Dr. Li will define the safe range at the time of surgery.
- Gradually unlock brace for sitting as PROM knee flexion improves. Usually after week 3.

#### Exercises:

- Ankle pumps
- Patellar mobilizations
- Hamstring stretch sitting
- Gastroc stretch with towel
- Heelslides
- Quad sets may add E-stim for re-education at 2-3 weeks upon MD approval
- Patellar mobilization all directions.

• SLR all directions, active assistive flexion- start at 3rd post-op week – do notallow lag – use e-stim as needed after 2-3 weeks. If unable to achieve full extension, perform SLR in knee immobilizer Brace locked at 0 degrees for ambulation for 6-8 weeks with use of bilateral axillary crutches.

#### Week 5:

Gradually increase A/AAROM knee flexion

#### Exercises:

- Submaximal multi-angle isometrics (30-50% only)
- Continue knee flexion ROM rocking chair at home

• Active SLR 4 way – no weight for flexion – watch for extensor lag – increase resistance for hip abduction, adduction, and extension.

Add aquatic therapy if available. Move slowly so water is assistive and not resistive

#### Aquatic therapy exercises:

- •With knee submerged in water, knee dangling at 80-90 degrees slowly activelyextend knee to 0 degrees.
- •Water walking in chest deep water
- •SLR 4 way in the water with knee straight
- •Knee flexion in water

#### Week 6-8:

- Brace unlock for sitting to 90 degrees at 6 weeks. If quad control sufficient at 8 weeks unlock brace 0-90 degrees for ambulation with bilateral axillary crutches and gradually open brace as ROM improves. Progress to ambulation at 8 weeks with no crutches as quadriceps strength allows. D/C crutches and brace at 8-12 weeks depending on patient's quadriceps control. Emphasize frequent ROM exercises
- Goals Gradually increase P/A/AAROM during weeks 6-8

#### Exercises:

- •Total gym semi squats level 3-4
- •Gradually increase weight on all SLR, if no lag present
- •Week 6 bike (begin with rocking and progress to full revolutions)
- •Week 6 Closed chain terminal knee extension with theraband

•Week 6 – SAQ (AROM)

- •Week 7 LAQ (AROM)
- •Week 8 SAQ (gradually increase resistance)
- •Week 8 LAQ (gradually increase resistance)
- •Week 8 weight shifts
- •Week 8 balance master and/or BAPS with bilateral LE weight bearing
- •Week 8 cones

#### Week 9-10:

Transition out of the brace with full weight bearing if possible.

#### **Exercises:**

- •Total gym level 5-6
- •Bilateral leg press concentric only no significant load work until 12 weeks.
- •Weight shift on minitramp
- •Toe rises
- •Treadmill Concentrate on pattern with eccentric knee control

## Week 11-16:

#### **Exercises:**

•Leg press – Gradually increase weight and begin unilateral leg press at week 12

- •Wall squats
- •Balance activities: unilateral stance eyes open and closed, balance master
- •Standing minisquats
- •Step-ups start concentrically, 2" to start and progress as tolerated
- •Week 16 lunges
- •Week 16 stairclimber/elliptical machine

### **CRITERIA TO START RUNNING PROGRAM**

•Patient is able to walk with a normal gait pattern for at least 20 minutes without symptoms and performs ADL's painfree

- •ROM is equal to uninvolved side, or at least 0-125 degrees
- •Hamstring and quadriceps strength is 80% of the uninvolved side isokinetically
- •Patient without pain, edema, crepitus, or giving-way.

#### Signature:

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