

## **PATELLAR TENDON REPAIR**

### **With Repair of the Medial and Lateral Retinaculum**

#### **General considerations:**

- Patients are weightbearing as tolerated with crutch use as needed postoperatively.
- Range of motion will be blocked at 0° in a brace for 4 weeks.
- Important not to push for flexion past 90° for 8 weeks postop to protect capsular repair.
- Regular manual and self-mobilization of the patella, patellar tendon, and portals should be performed to prevent fibrosis, improve range of motion, and functional mobility.
- Regular attention to proper VMO recruitment and patellofemoral mechanics will optimize outcome.
- \*Return to sports and activities are dependent on passing a functional sports test.

#### **Week 1:**

- MD office visit day 1 for dressing change, review of medications, and instructions on a home program.
- Gait training, pain and edema control, and muscle stimulation to improve quadriceps recruitment.
- Ankle pumps, quad and adduction sets, leg raises in multiple planes (except hip flexion).
- Extension stretching to hamstrings, calves, and lateral musculature to maintain extension range of motion.
- Well-leg stationary cycling and UBE. Upper body weight machines and trunk exercises.

#### **Weeks 2-4:**

- Continue to progress weightbearing and functional mobility as able.
- Resistive band hip exercises.
- Submaximal quad, glute, and abduction/adduction isometrics within the range restrictions.
- Hip flexion leg raises, calf raises, weight shifting, ankle exercises, balance, and proprioception exercises.
- Patella, suprapatellar pouch, and scar mobilization regularly.
- Pool walking and workouts as soon as incisions are well healed.

#### **Weeks 4-6:**

- MD visit at 1 month postop.
- Brace from 0-40° for day-to-day activities and exercises.
- Submaximal quad isometrics and ankle isometrics through multiple ranges.
- Light resistance leg press within range restrictions, abduction/adduction, and hip machines at the gym.
- Initiate weight shifting, short-arc knee bends and steps, and proprioceptive exercises within range.

#### **Weeks 6-8:**

- Increase range of motion to 0-80° in the brace and for exercises.
- Functional exercises should focus on eccentrics. Increase depth of knee bends and add step-ups.
- Continue to increase intensity and resistance of other exercises.
- Goals are to increase passive and functional range of motion. Passive flexion to 90° for stretching.
- Initiate two-legged bicycling for range of motion only and without resistance. Stair machine and Nordic Track in brace for cardiovascular.

**Weeks 8-12:**

- Increase range of motion in brace to full and wean off as able.
- Initiate passive flexion stretching to increase range of motion.
- Add lateral exercises (i.e., lateral stepping, lateral step-ups, etc.).
- Continue all exercises with emphasis on closed chain, functional, and proprioceptive program.
- Increase resistance of cycling, stair machine, and pool programs.

**Weeks 12-16:**

- Goals are to increase strength, power, and cardiovascular conditioning.
- Sport-specific exercises and training program.
- Maximal eccentric-focused strengthening program.
- Begin light running program as able to demonstrate good strength and mechanics.

**4-6 months:**

- Goals are to develop maximal strength, power, and advance to sporting activities.
- Resisted closed chain rehabilitation through multiple ranges.
- Running program, balance drills, and agility program.
- Initiate plyometric training as able to demonstrate adequate strength and proper mechanics.