

EXTENSOR REALIGNMENT WITH REPAIR OF THE MEDIAL PATELLOFEMORAL LIGAMENT POST-OP REHABILITATION PROGRAM

General considerations:

- Patients are weight bearing as tolerated with crutch use as needed post-operatively.
- Range of motion will be blocked at 0 degrees in a knee immobilizer for 4 weeks. They will wean to a patellofemoral neoprene brace first for sleeping, then around their house, and finally with all ADL's as soon as they are able to demonstrate adequate control of the lower extremity.
- Important not to push for flexion past 90 degrees for 8 weeks post-op to protect repair.
- Passive range of motion after the first 2 weeks once a day ONLY.
- Regular manual and self-mobilization of the patella (superior and inferior only), patella 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 sport and activities are dependent upon passing a functional, sports test.

Week 1:

- M.D. office visit at 1 day and 1 week post-op.
- Gait training, pain and edema control, and muscle stimulation to improve quadriceps recruitment.
- Ankle exercises, quad, adduction and gluteal 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 weight bearing and functional mobility as able.
- Resistive band hip exercises (except flexion).
- Submaximal quad, gluteal and abduction/adduction isometrics within the range restrictions.
- Hip flexion leg raises when able to demonstrate no quadricep lag.
- 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:

- M.D. visit at 1 month post-op.

- Wean from immobilizer first with sleeping, then around the house.
- Submaximal quad isometrics and ankle isometrics through multiple ranges.
- 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:

- Functional exercises should focus on eccentrics. Increase depth of knee bends and add stepups as able to demonstrate good motion and control.
- Continue to increase intensity and resistance of other exercises.
- Passive flexion to 90 degrees for stretching.

Weeks 8-12:

- More aggressive 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.
- Initiate two-legged stationary bicycling.
- Stair machine and Nordic Track in brace for cardiovascular.

Weeks 12-16:

- Goals are to increase strength, power, and cardiovascular conditioning.
- Sport-specific exercises and training program.
- Maximal eccentric focused strengthening program.
- Increase resistance of cycling, stair machine, and pool programs.

4-6 months:

- Goals are to develop maximal strength, power, and advance to sporting-simulation activities.
- Resisted closed-chain rehabilitation through multiple ranges.
- Begin light running program as able to demonstrate good strength and mechanics.

6-9 months:

- Running program, intensive balance drills and agility program.
- Initiate plyometric training as able to demonstrate adequate strength and proper mechanics.