



Medial Patello-Femoral Ligament Repair Protocol

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TREATMENT GUIDELINES

- a. Follow Up with Surgeon:
 - i. **2 weeks** post-op via a telemedicine visit. Please send updated PT notes to surgeon on last visit before telemedicine visit. Pt will be submitting on their own a picture of the incision via their EMR portal day before surgery. Fax therapy notes to (317) 718-2676
 - i. **6 weeks** in person with the surgeon. Please send therapy notes before follow-up appt.
- b. Suture Removal: Therapist to remove portal sutures at days 10-14.
 - i. Apply steri-strips over portal after removing sutures.
- c. Weight bearing as tolerated in brace locked in full extension until patient can demonstrate Independent SLR, then WBAT in unlocked brace until 6 weeks post-op.

POST-OPERATIVE WEEKS 0-2

GOALS:

- Minimize swelling
- Full knee extension
- Quadriceps strength to 3/5

CLINIC EXERCISES:

- Knee ROM limited to 0-90 first 6 weeks, no progressing past 90 until after 6 weeks
- Heel slides/wall slides to 30°
- Manual stretching of lower extremity musculature emphasizing hamstrings, IT band, and gastroc/soleus muscle groups.
- Foot /ankle mobility
- Ice/modalities PRN

HOME EXERCISES:

- Quad sets/SLR (No open chain quad exercises)
- Hamstring stretches
- Isometric contractions of the hamstring
- Foot/ankle mobility in long sitting position with Theraband
- Routine ice, elevation

POST-OPERATIVE WEEKS 2-6



GOALS:

- Range of motion goal of 0-90° by the end of 6 weeks, do not exceed 90 deg before 6 weeks.
- Independent with WBAT gait with use of in brace.
- Fair recruitment of VMO
- Equal hamstring length on involved and uninvolved sides
- Eliminate effusion
- Quadriceps strength to 3+/5

PRECAUTIONS/CONTRAINDICATIONS:

- Active assisted/Passive range of motion 0-60 (week 4)
- Active assisted/Passive range of motion 0-90 (week 6)
- Brace at all times with ROM limitations of 0-60°
- WBAT gait
- No resistive open chain exercises for the quadriceps for 4 weeks

CLINIC EXERCISES:

- Edema reduction techniques PRN
- Initiate incision mobilization and desensitization techniques
- NMS for muscle re-education of the quadriceps complex emphasizing VMO if inhibition noted. This is to be performed in supine only and if can be accomplished pain-free.
- Manual stretching of lower extremity musculature emphasizing hamstrings, IT band, and gastroc/soleus muscle groups.
- Quad sets / SLR supine if accomplished pain-free
- Closed chain exercises with brace when strength sufficient to begin in 0-90 degree range
- Balance and proprioception activities. (Single leg stance)
- Bike-rocking limited to 60°
- Leg curls

HOME EXERCISES:

- Quad sets/SLR
- Heel slides from 0-90°
- Bridges
- Multi-directional hip SLR exercises
- Routine post-exercise ice

POST-OPERATIVE WEEKS 6-12

GOALS:

- Wean out of brace (6 weeks)
- Active assisted/Passive range of motion through full ROM

CLINIC EXERCISES:



- Continue with treatment as indicated
- Initiate function electrical stimulation at 90°
- Progress closed chain strengthening program (step ups, Total Gym squats 0-60 deg)
- Further progress balance/proprioception exercises
- Initiate manual stretching of quadriceps in relatively pain-free ROM
- Initiate walking program on level surfaces. Begin low intensity for 5-7 minutes and gradually progress to 30-45 minutes.
- Can initiate Treadmill walking and Stairmaster

HOME EXERCISES:

- Continue home exercises as indicated Post-operative weeks 2-6, but add progressions as done during clinic sessions

POST-OPERATIVE WEEKS 12-Discharge

GOALS:

- Meet Discharge Criteria

CLINIC EXERCISES:

- Continue with treatment as indicated.
- Further progress balance/proprioception exercises
- May begin vertical squats 0-70 deg
- May initiate low level plyometrics if patient can perform 5 repetitions of the leg press in 5 seconds at 60% of body weight and perform single leg balance with and without visual cueing X 30 seconds.
- Isokinetic evaluation if patient is an athlete or if ordered by physician at. If patient meets 20-25% hamstring/quadriceps deficit, initiate walk/jog program. Repeat isokinetic tests every four weeks until 15% or less quadriceps/hamstring deficits noted.
- Perform one-legged hop tests for distance and time. Involved leg must be 85% or less as compared to uninvolved leg for plyometric progression to begin
- Functional test at 4 months

HOME EXERCISES:

- Progress as tolerated with open and closed chain exercises.

DISCHARGE CRITERIA

- Symmetrical hip/knee/ankle ROM or within 10-15% of uninvolved active flexion.
- Minimal to no patellar limitations.
- No effusion.
- Good size and recruitment of the VMO.
- Normal gait.
- No incisional hypersensitivity or adherence.
- 5/5 strength of hip and ankle musculature



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- 5/5 strength of quadriceps and hamstrings if non-athlete
 - 80-85% quadriceps and hamstring strength compared to uninvolved knee musculature according to isokinetic evaluation of athlete.
 - If non-athlete, squat 90°/ kneel pain free.
 - If athlete, full squat and kneel pain-free.
 - Jog ¼ mile pain-free.
 - Hop test at 90% of un-involved side
 - Good understanding and performance of HEP.
 - Met, or consistently progressing toward, established functional/objective outcomes.
 - Failure to progress.
 - Failure to comply.