

**Lisa Kaplin, DO**

## **Post-Operative Rehabilitation Guidelines for Patella Fracture Open Reduction Internal Fixation**

### **General Guidelines:**

- Patient will be weight bearing as tolerated in brace.
- Transfers need to be assisted for operative leg.
- Avoid active knee extension for 3 weeks.
- Limited ROM brace should initially be locked at 0° and then unlocked to 30° as tolerated for ambulation and ADL's once adequate Quad control is established.
- Sleep with the brace locked at 0° for immobilization unless otherwise instructed by physician
- Keep the entire leg elevated.
  - Do not place pillows under the knee
  - Use ice for 20 to 30 minutes every hour for pain and swelling reduction.
- Keep incisions dry for 5 days but may shower anytime postoperatively.

### WEEKS 0-6:

- Modalities as needed for pain and swelling.
- May perform gentle patellar mobilizations in all directions.
- Initiate gastrocnemius and hamstring stretches.
- Restore FULL knee extension within 2 weeks (low load-long duration stretching).
- Ankle ROM/strengthening for swelling and DVT prevention.
- **Limit ROM to 0° for first 3 weeks.**

**Weeks 3-5 can perform PROM 0°-30°.**

**Weeks 5-7 ROM 0-60°.**

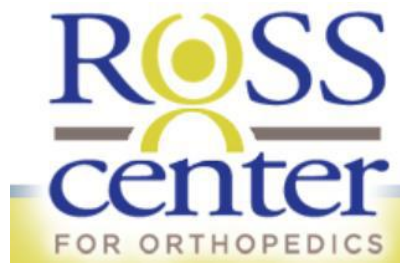
**Weeks 7-9 ROM 0-90°.**

**Full ROM after week 10.**

- 3-way (ABD/EXT/ADD) open chain straight leg exercises once pain is under control and adequate QUAD control established.
- Week 2 may begin active assisted SLR and progress to active SLR by week 3 as long as there is no extensor lag.
- Focus on knee remaining locked in concentric and eccentric phase of leg lifts. Increase reps and hold time initially, before adding resistance. No ankle weight until extensor lag is eliminated.

### WEEKS 6-8:

- Increase ROM as tolerated.
- May unlock brace for sitting to 90 degrees at 8 weeks. When quad control is sufficient, unlock brace for ambulation with bilateral crutches.
- Discontinue use of crutches and brace at week 8 if patient has adequate quad control.
- Continue to increase hip resistance during FLEX/ABD/ADD/EXT open chain exercises as tolerated.



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- Progress to bilateral closed kinetic chain exercises after patient is full weight bearing.
- Soft tissue mobilizations as needed for scar and myofascial restrictions.
- Initiate stationary bike for range of motion without resistance.
- May start light aquatic exercises once good quadriceps control is established.

### WEEKS 9-12:

- ROM to WNL's as tolerated.
- Increase resistance with all exercises as tolerated.
- Start bilateral leg and calf press
- Initiate balance activities and progress as tolerated (ex. Weight shifts, step ups, SLS, proprioceptive training)
- Increase leg strength, allow for normal gait and walking longer distances.
- Increase resistance with stationary bike for strength and endurance training.

### MONTHS 3-6:

- Low impact weight program increasing intensity of strength and functional training for a gradual return to normal activities.
- Week 12-14 start elliptical trainer.
- Core strengthening.
- Week 16 start with bilateral plyometric drills and progress to unilateral as tolerated by the patient.
- Initiate running program after week 16.

### MONTHS 6-9:

- Continue with advanced strengthening program.
- Sport specific training (if applicable).
- Functional test for return to sport.