Salina Regional Orthopedic Clinic
Salina Regional Health Center

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Name: _____ ☐ Right ☐ Left Date: _____

Date of Surgery: _____ ___ visits per week for ___ weeks

Post – Operative Phase I (Week 0-6)

Surgery Type:

Location:
☐ MFC ☐ LFC ☐ Trochlea ☐ Patella
☐ MTP ☐ LTP

Brace use: ___ weeks

☐ TTWB ☐ PWB x ___ weeks
☐ WBAT

Notes:

Goals:

- Control post-operative pain / swelling
- Range of Motion 0 □ 130°
- Prevent Quadriceps inhibition
- Restore normal gait
- Normalize proximal musculature muscle strength
- Independence in home therapeutic exercise program

Precautions:

- Progressive weight bearing with crutches after week 1
- Avoid neglect of range of motion exercises

Treatment Strategies:

- Continuous Passive Motion (CPM) (1-3 hours/day)
- Active – Assistive Range of Motion Exercises (Pain-free ROM)
- Towel extensions
- Patella mobilization all planes
- TTWB postoperative week one with two crutches
- Progressive Weight Bearing as Tolerated with crutches (D/C crutches when gait is non-antalgic)
- Postoperative bracing for 2 weeks postoperatively then can D/C
- Underwater treadmill system (gait training) if incision benign
- Quadriceps re-education (Quad Sets with EMS or EMG)
- Multiple Angle Quadriceps Isometrics (Bilaterally – Submaximal, Avoid lesion)
- Short Crank ergometry → Standard ergometry
- SLR's (all planes)
- Hip progressive resisted exercises
- Leg Press (60→0° arc) Bilaterally
- Bracing / Patella sleeve per MD preference
- Pool exercises
- Cryotherapy
- Plantar Flexion Theraband
- Lower Extremity Flexibility exercises
- Upper extremity cardiovascular exercises as tolerated
- Home therapeutic exercise program: Evaluation based
- Emphasize patient compliance to home therapeutic exercise program and weight bearing progression

Criteria for Advancement:

- Normalized gait pattern
- ROM 0 → 130°
- Proximal Muscle strength 5/5
- SLR (supine) without extension lag

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Post-Operative Phase 2 (Week 6-12)

Goals:
- ROM 0° → WNL
- Normal patella mobility
- Ascend 8"stairs with good control without pain (may need to modify for patellar & trochlear lesions)

Precautions:
- Avoid descending stairs reciprocally until adequate quadriceps control & lower extremity alignment is demonstrated ▪ Avoid pain with therapeutic exercise & functional activities

Treatment Strategies:
- Continue Progressive Weight Bearing as Tolerated /Gait Training with crutches (if needed)
- Brace / Patella sleeve per therapist and patient preference
- Underwater treadmill system (gait training)
- Gait unloader device
- AAROM exercises
- Patella mobilizations
- Leg Press (90→0° arc) Bilaterally → Eccentric
- Mini Squats
- Retrograde treadmill ambulation ▪ Proprioception/Balance training:
- Proprioception board / Contralateral Theraband Exercises / Balance systems
- Initiate Forward Step Up program ▪ Stairmaster
- SLR's (progressive resistance)
- Lower extremity flexibility exercises
- OKC knee extension to 40° – *(pain/crepitus free arc)*
- Home therapeutic exercise program: Evaluation based

Criteria for Advancement:
- ROM 0° □ WNL
- Demonstrate ability to ascend 8" step
- Normal patella mobility

Post-Operative Phase 3 (Week 12-18)

Goals:
- Demonstrate ability to descend 8"stairs with good leg control without pain
- 85% limb symmetry on Isokinetic testing & Forward Step Down Test
- Return to normal ADL
- Improve lower extremity flexibility

Precautions:
- Avoid pain with therapeutic exercise & functional activities
- Avoid running till adequate strength development and MD clearance

Treatment Strategies:
- Progress Squat program

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- Initiate Step Down program
- Leg Press (90 □ 0° emphasizing eccentrics)
- OKC knee extensions 90 □ 0° (*pain/crepitus free arc*)
- Advanced proprioception training (perturbations)
- Agility exercises (sport cord)
- Elliptical Trainer
- Retrograde treadmill ambulation / running
- Hamstring curls / Proximal strengthening
- Lower extremity stretching
- Forward Step Down Test (NeuroCom)
- Isokinetic Test
- Home therapeutic exercise program: Evaluation based

Criteria for Advancement:
- Ability to descend 8"stairs with good leg control without pain
- 85% limb symmetry on Isokinetic testing & Forward Step Down Test

Post-Operative Phase 4 – Return to Sport (week 18 +)

Goals:
- Lack of apprehension with sport specific movements
- Maximize strength and flexibility as to meet demands of individual's sport activity
- Isokinetic & Hop Testing $\geq$ 85% limb symmetry

Precautions:
- Avoid pain with therapeutic exercise & functional activities
- Avoid sport activity till adequate strength development and MD clearance
- Be conscious of Patellofemoral overload with increased activity level

Treatment Strategies:
- Continue to advance LE strengthening, flexibility & agility programs
- Forward running
- Plyometric program
- Brace for sport activity (MD preference)
- Monitor patient's activity level throughout course of rehabilitation
- Reassess patient's complaint's (i.e. pain/swelling daily – adjust program accordingly)
- Encourage compliance to home therapeutic exercise program
- Home therapeutic exercise program: Evaluation based

Criteria for Discharge:
- Isokinetic & Hop Testing $\geq$ 85% limb symmetry
- Lack of apprehension with sport specific movements
- Flexibility to accepted levels of sport performance
- Independence with gym program for maintenance and progression of therapeutic exercise program at discharge