

Gregory Galano, MD
www.gregorygalanomd.com
phone: 212-737-3301
fax: 212-734-0407
license #: 241830

Patient Name:

Date:

**Knee Rehabilitation:
MCL sprain (Grade III)**

Phase I (Weeks 0-3)

Goals:

- _ Emphasis on knee protection from valgus forces
- _ Control pain / swelling
- _ Range of Motion 0 @ 120°
- _ Prevent Quadriceps inhibition
- _ Independence in home therapeutic exercise program

Treatment Strategies:

- _ Towel extensions, prone hangs, etc.
- _ Quadriceps re-education (Quad Sets with EMS or EMG)
- _ Progressive Weight Bearing PWB → WBAT with brace locked at 0° with crutches
- _ Patella mobilization
- _ Active flexion / Active-Assisted extension Exercise
- _ SLR's (avoid Adduction)
- _ Short Crank ergometry
- _ Hip progressive resisted exercises
- _ Proprioception Board (bilateral weight bearing / sagittal plane only)
- _ Leg Press (bilateral / 70 @ 5° arc) (if ROM > 90°)
- _ Knee Extension Isometrics (Sub-maximal - Bilaterally @ 60°)
- _ Upper extremity cardiovascular exercises as tolerated
- _ Cryotherapy
- _ Home therapeutic exercise program: Evaluation based
- _ Emphasize patient compliance to home therapeutic exercise program and weight bearing precautions / progression

Phase 2 (week 3-6)

Goals:

- _ ROM 0 → 140°
- _ Good patella mobility
- _ Minimal swelling
- _ Restore normal gait (non-antalgic)
- _ Ascend 8" stairs with good control without pain

Precautions:

- _ Avoid descending stairs reciprocally until adequate quadriceps control & lower extremity alignment
- _ Avoid pain with therapeutic exercise & functional activities

Treatment Strategies:

- _ Progressive Weight Bearing/WBAT with crutches brace opened 0 @ 50°, if good quadriceps control (good quad set / ability to SLR without lag or pain)
- _ D/C crutches when gait is non-antalgic
- _ Standard ergometry (if knee ROM > 115°)
- _ Leg Press (85→0° arc)
- _ AAROM exercises
- _ Mini Squats / Weight Shifts

- _ Proprioception training: Prop board / Contralateral Theraband Exercises
- _ Sagittal & Frontal Planes
- _ Initiate Forward Step Up program, advance to Stairmaster
- _ Aquaciser (gait training)
- _ SLR's (progressive resistance)
- _ Adduction (if pain free)
- _ Hamstring / Calf / Quadriceps flexibility exercises
- _ Hip / Hamstring PRE
- _ Active knee extension to 0° (PRE pain - free ROM)
- _ Home therapeutic exercise program: Evaluation based

Phase 3 (week 6-12)

Goals:

- _ Restore Full ROM
- _ Demonstrate ability to descend 8" stairs with good leg control without pain
- _ Improve ADL endurance
- _ Functional & Isokinetic Testing > 85% Limb Symmetry
- _ Improve lower extremity flexibility
- _ Protect patello-femoral joint

Precautions:

- _ Avoid pain with therapeutic exercise & functional activities
- _ Avoid running and sport activity till adequate strength development and MD clearance

Treatment Strategies:

- _ Progress Squat program (PRE)
- _ Brace changed to MD preference (OTS brace, Patella sleeve, etc.)
- _ Initiate Step Down program
- _ Lunges
- _ Isokinetic training (fast → moderate velocities)
- _ Advanced proprioception training (perturbations)
- _ Agility exercises (sport cord)
- _ Retrograde treadmill ambulation / running
- _ Forward Step Down Test (NeuroCom)
- _ Forward running
- _ Plyometric Exercises
- _ Sport Specific Training
- _ Functional & Isokinetic Testing
- _ Home therapeutic exercise program: Evaluation based

Criteria for Advancement / Return to Sport

- _ ROM to WNL
- _ Ability to descend 8" stairs with good leg control without pain
- _ Hop Tests & Isokinetic Test > 85% limb symmetry
- _ Lack of apprehension with sport specific movements
- _ Flexibility to accepted levels of sport performance

Please send progress notes.

Physician's Signature: _____
Gregory Galano, MD