

Robert Kollmorgen DO

MCL Non Operative Protocol

Phase 1: Week 1-2

Range of Motion:

- Passive ROM, No limits
- Aggressive Patella mobility
- Ankle pumps
- Gastroc-soleus stretches
- Wall slides
- Heel slides

Strength:

- Quad sets x 10 minutes
- SLR (flex, abd, add)
- Multi-hip machine (flex, abd, add)
- Mini squats (0-45 °)
- Multi-angle isometrics (90-60 °) (No tension on MCL)
- When working adductors stress point should be superior to knee
- Calf Raises

Balance Training:

- Weight shifts (side/side, fwd/bkwd)
- Single leg balance
- Plyotoss

Weight Bearing:

- Wt bearing as tolerated
- Crutches until quad control is gained, then discontinued

Bicycle:

- May begin when 110 ° flex is reached

Modalities:

- E-stim/biofeedback as needed
- Ice 15-20 minutes with knee at 0 ° ext

Brace:

- Wear brace at all times with the following exceptions:
 - o Remove brace to perform ROM and PT activities
- Immobilizer is D/C'd at 2 weeks pending physician exam

Goals for Phase 1:

- ROM 0-110 °
- Adequate quad contraction
- Control pain, inflammation, and effusion

Phase 2: Week 3

Range of Motion:

- Passive ROM, No limits
- Aggressive Patella mobility

Strength:

- Continue remedial strengthening as needed

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- Leg press
- Step up, step down
- Stairmaster
- Leg curl
- Multi-hip machine (flex, abd, add)
- When working adductors stress point should be superior to knee

• Calf Raises

Weight Bearing:

- Full weight bearing

Bicycle:

- Increase tension

Balance Training:

- Balance board/2 legged
- Cup walking/hesitation walk
- Single leg balance
- Plyotoss

Modalities:

- E-stim/biofeedback as needed
- Ice 15-20 minutes with knee at 0 ° ext

Brace:

- Wear brace at all times with the following exceptions:
 - o Remove brace to perform ROM and PT activities
- Immobilizer is D/C'd at 2 weeks pending physician exam

Goals for Phase 2:

- ROM 0-125 °
- Increase muscle strength and endurance
- Restore proprioception

Phase 3: Week 4

Range of Motion:

- Passive ROM, No limits
- Aggressive Patella mobility

Strength:

- Progressive resistance exercises
- Smith press
- Leg press
- Step up, step down
- Stairmaster
- Leg curl
- Multi-hip machine (flex, abd, add)
- When working adductors stress point should be superior to knee
- Calf Raises

Weight Bearing:

- Begin jogging
- Progress functional agility exercises as tolerated

Bicycle:

- Increase tension

Balance Training:

- Balance board/2 legged

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- Cup walking/hesitation walk
- Single leg balance

Modalities:

- E-stim/biofeedback as needed
- Ice 15-20 minutes with knee at 0 ° ext

Brace:

- None

Goals for Phase 3:

- ROM Full
- Increase muscle strength and endurance
- Jogging
- Functional Agility Exercises

Phase 4: Week 5-6

Range of Motion:

- Passive ROM, No limits
- Aggressive Patella mobility

Strength:

- Progressive resistance exercises
- Smith press
- Leg press
- Step up, step down
- Stairmaster
- Leg curl
- Multi-hip machine (flex, abd, add)

Weight Bearing:

- Functional agility exercises as tolerated
- Progress to sprinting
- Progress to sports specific agility drills

Bicycle:

- As needed

Balance Training:

- Steam boats in 4 planes
- Single leg stance with plyotoss
- Wobble board balance work-single leg
- ½ Foam roller work

Modalities:

- E-stim/biofeedback as needed
- Ice 15-20 minutes with knee at 0 ° ext

Goals for Phase 4:

- ROM Full
- Increase muscle strength and endurance
- Sprinting
- Sport Specific Agility Exercises

Return to sport is allowed when the patient can perform sprinting and sports specific agility drills in an unrestricted manner. This usually occurs at the 5-6 week post-injury date. A physician's exam should be performed prior to a full release to all activities without restriction.