



## Non-operative Treatment of Medial Collateral Ligament (MCL) Sprains

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- Phase I – Protection Phase
- Day 1
  - Goals
    - Re-establish non-painful ROM
    - Decrease pain and inflammation
    - Prevent muscular inhibition
    - Promote healing of MCL
  - Cryotherapy for pain/inflammation
    - Ice 15-20 minutes every hour
  - Brace
    - Hinged brace if needed
  - Weight-bearing
    - WBAT, crutches as needed
  - ROM
    - As tolerated
  - E-stim
  - Isometric quad exercises
- Day 2
  - Continue above exercises
  - SLR
  - Hamstring isometrics
  - Whirlpool if available (Cold first 3-4 days, then warm)
- Day 3-7
  - Continue above exercises
  - Eccentric quad exercises
  - Bicycle for ROM
  - Initiate hip strengthening
  - Mini-squats, isotonic leg press
- Phase II – Moderate Protection Phase
  - Goals

- Full, painless ROM
    - Improve strength
    - Decrease pain and inflammation
  - Criteria to progress to Phase II
    - No increase in instability
    - No increase in swelling
    - Minimal tenderness
    - PROM 10-100 degrees
- Week 2
  - Continue use of ice as needed
  - May use heat prior to ROM exercises
  - Progress above exercises as ROM improves
  - Emphasize closed-chain exercises
  - Bicycle for endurance
  - Pool therapy (if available)
  - Use of modalities as needed
  - Proprioception training
  - Flexibility exercises
- End of week 2
  - Continue above exercises
  - Initiate isokinetics (submaximal)
  - Begin running program if full painless ROM is present
- Phase III – Minimal Protection Phase
  - Goals
    - Improve strength/power/endurance
    - Improve neuromuscular control
    - Gradual return to functional activities
  - Criteria to progress to Phase III
    - Minimal pain/tenderness
    - Full, painless ROM
    - No instability
  - Continue above exercises
  - Strengthening program
    - Emphasize functional exercise drills, eccentric quads
    - Isotonic hip adduction, medial hamstrings
  - Initiate agility program/sport specific activities
- Phase IV – Maintenance Phase
  - Criteria to return to sports
    - Full non-painful ROM
    - No pain/tenderness

- No instability
  - Muscle strength 85% of contralateral leg
  - Satisfactory proprioception
  - Satisfactory clinical exam
  - Brace if needed
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- Continue above exercises
  - Plyometrics
  - Gradual return to sports activities