

## MCL Repair Jonathan M. Cooper, DO

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The surgeon may specify on the referral any specific requests or deviations that fall outside the scope of this protocol, including if *deceleration* of these time frames is desired.

Phase I	Phase II	Phase III	Phase IV
(Weeks 0 – 4)	(Weeks 4 – 8)	(Weeks 8 – 12)	(Weeks 12 – 28+)
PRECAUTIONS  • WBAT with crutches required  • Wear brace at all times except when bathing  • Brace locked in extension for ambulation  CLINICAL CARE  • Swelling/Wound management  • NMES  • Gait Training  EXERCISES  • Gentle AROM/AAROM  • Patellar mobilization  • Ankle pumps  • Quad sets  • SLR (no extensor lag, in brace)  • NMES is strongly recommended to improve quad strength  CRITERIA to advance  • SLR without lag  • Single leg stance w/ UE support  • ROM  • Extension: 0°  • Flexion: 70°	PRECAUTIONS  • WBAT with crutches until sufficient quad control then discontinue crutches  • Wear brace at all times (except when bathing) locked in extension until good quad control then open 0-90°  • CKC (0-60°) for strength training  CLINICAL CARE  • Swelling management  • Work on normalizing gait  • NMES  • Manual knee flexion and extension stretching  • Light scar mobilization when wound closed  • Pool therapy when OK'ed by MD  EXERCISES  • AROM, AAROM, PROM for flexion and extension (goal of 120°)  • Bike for ROM  • Forward and lateral step ups  • Double leg calf raises  • Basic proprioceptive activities  • Continue NMES  CRITERIA to advance  • Normal gait mechanics  • Single leg stance control w/o UE support  • Effusion managed  • ROM  • Flexion: > 110°	PRECAUTIONS  • Watch for patellofemoral pain  • FWB  • Continue brace for ambulation until good quad control and 8 weeks postop or 12 weeks with limited quad control  • Watch hip/knee alignment with single leg squatting  CLINICAL CARE  • Blood Flow Restriction Training  • Manual Therapy PRN  • Eccentric Training (CKC)  EXERCISES  • Stationary biking with resistance  • CKC hip strengthening single leg without dynamic valgus  • Step downs  • Core exercises  CRITERIA to advance  • Negotiate stairs normally  • Restore limb confidence  • ROM  • Full extension  • Flexion within 5° of uninvolved side	PRECAUTIONS  Watch hip/knee alignment with single leg squatting  No jumping, cutting, or sprinting until cleared  Hold on return to run or hop testing until quad limb symmetry index (LSI) is > 80% and minimal effusion  Functional brace for cutting/sports activities  CLINICAL CARE  Blood Flow Restriction Training for atrophy as needed  EXERCISES 12-20 weeks  Leg press (double progress to single)  Advance CKC strengthening single leg without dynamic valgus  Seated knee extension (90-45°)  Lunges  Begin light hamstring strengthening 20+ weeks  Stairmaster, elliptical  Running: initiate walk-jog program when the following criteria are met:  80% quad LSI  Effusion - trace or less  Jumping: double progress to single leg on unstable surfaces  Agility drills/plyometrics  28+ weeks  Cutting/sport specific activities if cleared  CRITERIA to advance  Return to sport or heavy work cleared by MD  > 90% of limb symmetry on Functional Testing  Within 1 cm quad girth difference side