

**Grade 3 MCL  
Repair/Reconstruction Post-Op  
Protocol  
Dr. Adam V. Metzler**

\*\*\*If you have any questions about this protocol or about the patient, do not hesitate to email Dr. Adam Metzler at:  
ametzler@orthonky.com

**PHASE 1: Weeks 0-3**

**ROM: Telescoping brace  
week 0-3: 0-90 degrees**

**BRACE LOCKED IN FULL  
EXTENSION FOR AMBULATION  
X 3 WEEKS AND NWB**

**Weight Bearing: non-weight bearing x 6  
weeks**

**Modalities:** Cryotherapy  
Pulsed US  
NMES quadriceps

**RX: Recommendations:**  
Exercises in ROM guidelines to allow  
healing of MCL

**NO BIKE FOR 6 WEEKS**

Flexibility exercises  
PROM / AAROM / AROM per  
tolerance per ROM guidelines

Encourage ROM activities to  
facilitate scar remodeling

Biofeedback QS, SLR, CKC  
knee extension per ROM  
M<I Quads/Hams 30, 50, 70,  
90 deg

Hamstrings isotonic per ROM

Quadriceps isotonic per ROM  
Total leg strengthening  
Hip 3 way SLR (avoid  
adduction)

CV conditioning  
Core stability training  
Upper body exercises

**PHASE 2: Weeks 3-6**

**ROM: Progress to full motion in brace,  
brace can be shortened and unlocked for  
ambulation**

**Weight Bearing: NWB**

**Modalities:** Cryotherapy  
Pulsed US  
NMES quadriceps

**RX: Recommendations:**  
Exercises in ROM guidelines to  
allow healing of MCL

**NO BIKE FOR 6 WEEKS**

Flexibility exercise  
PROM / AAROM / AROM per  
tolerance per ROM guidelines

Biofeedback SLR, CKC knee  
extension per ROM

Hamstring isotonic per ROM  
Quadriceps isotonic per ROM  
Isokinetic quadriceps/hamstrings

Hip 4 way SLR (proximal pad  
placement for Hip  
Adduction)  
Heel raises

CKC exercises – LIMITED leg press,  
stepups, squats,

Total leg strengthening  
Functional strengthening  
Balance / Proprioception per WB  
gradual frontal plane stresses  
Perturbation training  
CV conditioning  
Core stability training

if 75% strength  
CV conditioning / Core stability

MONTHS 4 - 6

- Continue appropriate previous exercises •
- Agility drills / Plyometrics
- Sit-up progression
- Running progression to track
- Transition to home / gym program

### **Phase 3: Weeks 6+**

#### **ROM: Progress to full motion and full weight bearing**

Discontinue crutches when good quad control and reliably able to walk without a limp

GOAL - Return to all activities

\*NO CONTACT SPORTS UNTIL 6 MONTHS POST-OP\*

**Bracing:** Consider conversion to hinged knee sleeve if good valgus exam, otherwise continue telescoping brace when on feet for more than 30 minutes with brace shortened and unlocked

#### **Return to Work/Sport**

No pain or effusion  
Full ROM  
Isokinetic Strength- 90%  
Functional Tests – 90%  
MD approval  
Brace for athletics/ vocational

#### **Modalities:** Cryotherapy

#### **RX:** Recommendations:

Bike with resistance  
Elliptical Runner / Stairmaster  
Flexibility exercises  
Isotonic quadriceps/hamstrings  
Isokinetic quadriceps/hamstrings  
Hip strengthening  
Heel raises  
CKC exercises  
Total leg strengthening  
Functional strengthening  
Balance/Proprioception/Perturbation

**8 wks** Lateral movements –  
sideshuffles

**12 wks** Return to running if 75%  
strength

#### **12wks**

Plyometrics / Agility and  
Sport-specific exercises