Connecticut Orthopaedics

Megan R. Wolf, MD
Sports Medicine/Foot & Ankle

MCL Repair/Reconstruction
Post-Operative Protocol

Phase 1: Acute (0-4 Weeks)

Phase Goals: Protect flexion, restore ambulation and ADL status

Range of Motion
- **0-1 Weeks**: Flexion allowed—0-30 degrees
- **1-2 Weeks**: Progress flexion to 60 degrees
- **2-3 Weeks:** Progress flexion to 90 degrees

Weight Bearing
- **0-2 Weeks:** Toe touch weight bearing
- **2+ Weeks:** Weight bearing as tolerated

Brace & Crutch Use:
- **0-3 Weeks:** Brace locked at 0 deg until 10 straight leg raises
- **2-4 Weeks:** Open brace to 60 deg *with good quad control
- **4+ Weeks:** Open to full & d/c when gait is normal

Strengthening & Conditioning

Quad sets, straight leg raises, Hip ABD & Single-leg balance

CRITERIA FOR AMBULATION WITHOUT ASSISTIVE DEVICE
- 2 weeks post-surgery & pain less than 3/10 (worst)
- At least 0 deg knee extension & 75 deg knee flexion
- ≥ 30 straight leg raises without lag
- Perform at least 20 sec of single leg balance
- MD or PT approval

Phase 2: Strength (4-12 Weeks)

Phase Goals: Improve strength & Initiate jogging program

Range of Motion

4+ Weeks: Progress to full flexion

Strengthening

Short-arc leg press, step-ups & Romanian deadlifts (RDLs)
Squat progression (bodyweight squats→single leg squats)
Resisted hip abduction lateral band walks
Core exercises (V-ups, Single-leg bridging)

Conditioning

Stationary biking—initiate at 110 degrees flexion
Elliptical & Rowing machine

CRITERIA FOR JOGGING

- At least 10 weeks post-surgery
- Pain less than 3/10 (Worst)
- Within 2 deg normal knee extension & 120 deg knee flexion
- Quadriceps & hamstring strength ≥ 60% normal
- Perform at least 1 minute of single leg squats
- MD or PT approval

Phase 3: Agility (12-16 Weeks)

Phase Goals: Introduce dynamic & Power movements

Strengthening

Gym specific strengthening (Barbell squats & deadlifts)
Biodex quad & hamstring fatigueing protocols
Core exercises (Mountain climbers, Planks, V-Ups)

Conditioning

Road or stationary biking
Jogging program
Swimming (Progress kicking gradually & pain free)

Plyometrics & Light Agility

Ladder drills, box jumps (up to 12”), side shuffle

CRITERIA FOR HEAVY AGILITY & SPORT SPECIFIC MOVEMENTS

- ≥ 16 Weeks post-surgery
- Pain less than 2/10 (worst)
- Quad & hamstring strength ≥ 80% normal; ≥ 50% H/Q Ratio for females
- At least 3 minutes of single leg squats (resisted)
- ≤ 5 on landing error scoring system (LESS)
- MD or PT Approval

Phase 4: Return to Play (16+ Weeks)

Phase Goals: Initiate sports specific movements & Return to Play

Strengthening

Progress gym strengthening (barbell squats, deadlifts, etc)
Biodex quad & hamstring fatigue protocols & core exercises

Conditioning

Jogging, biking & swimming
Interval sprint workouts

Polyometrics & Agility (2-3 days/week)

Max effort box jumps (progress with Rotation)
Lateral & Rotational agility
Single-leg hops
Unpredictable cutting & contact drills

RECOMMENDED CRITERIA FOR RETURN TO PLAY

- Pain less than 2/10 (Worst)
- Quad & Hamstring strength $\geq$ 90 normal; $\geq$ 60% H/Q Ratio for females
- 90% normal on all single-leg hop tests
- 95% normal on figure of 8, 5-10-5 Pro-agility & S-L vertical jump
- MD or PT approval