

UT★ORTHO

A Part of UT Physicians

MCL
Repair/Reconstruction

Post-Operative Rehabilitation Protocol

Ironman Sports Medicine Institute

1st Edition

UT★ORTHO
A Part of UT Physicians

MCL Protocol

PHASE 1 - ACUTE (0-4 WEEKS)

PHASE GOALS: PROTECT FLEXION, RESTORE AMBULATION & ADL STATUS

RANGE OF MOTION

0-1 WEEKS - FLEXION ALLOWED: 0-30 DEGREES

1-2 WEEKS - PROGRESS FLEXION TO 60 DEGREES

2-4 WEEKS - PROGRESS FLEXION TO 90 DEGREES

WEIGHT BEARING

0 - 2 WEEKS - TOE-TOUCH WEIGHT BEARING

2+ WEEKS - WEIGHT BEARING AS TOLERATED

BRACE & CRUTCH USE

0-2 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**

MCL Protocol

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 (RDL)

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 \geq 60 % NORMAL**
- **PERFORM AT LEAST 1 MINUTE OF SINGLE LEG SQUATS**
- **MD OR PT APPROVAL**

MCL Protocol

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)

PLYMETRICS & 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 & HAM 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**

MCL Protocol

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

PLYOMETRICS & AGILITY (2-3 DAYS/WEEK)

MAX EFFORT BOX JUMPS (PROGRESS WITH ROTATIO)

LATERAL & ROTATIONAL AGILITY

SINGLE-LEG HOPS

UNPREDICTABLE CUTTING & CONTACT DRILLS

RECOMMENDED CRITERIA FOR RETURN TO PLAY

- **PAIN LESS THAN 2/10 (WORST)**
- **QUAD & HAM 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**