



KNEE MANIPULATION UNDER ANESTHESIA (MUA) PHYSICAL THERAPY PROTOCOL
GENERAL GUIDELINE ONLY. FOLLOW YOUR SURGEON'S SPECIFIC PROTOCOL IF IT DIFFERS.

Goals

- Maintain gains in knee range of motion (**ROM**)
- Reduce swelling and pain
- Restore quadriceps strength
- Normalize gait and function
- Preventing recurrent stiffness

PHASE I: IMMEDIATE POST-MUA (WEEKS 0-2)

Frequency: PT often 3-5 times/week initially.

ROM

- Aggressive ROM beginning immediately after MUA
- Heel slides
- Active-assisted ROM progressing to active ROM
- Patellar mobilizations
- Emphasis on achieving full extension and improving flexion

Exercises

- Quad sets
- Hamstring sets
- Straight-leg raises
- Isometric Adduction/abduction
- Stationary bike as tolerated
- Gentle stretching.

Weight Bearing

- Usually, weight bearing as tolerated with assistive devices as needed.

PHASE II: EARLY STRENGTHENING (WEEKS 2-6)

Goals

- Achieve/maintain full ROM
- Improve gait
- Increase lower-extremity strength

Exercises

- Closed chain strengthening
- Mini squats
- Step-ups
- Hamstring curls
- Balance/proprioception training
- Stationary bike and elliptical

PHASE III: ADVANCED STRENGTHENING (WEEKS 6-12)

Goals

- Full, pain-free ROM
- Functional strength restoration
- Return to desired activities

Exercises

- Progressive strengthening
- Single-leg balance activities
- Functional and sport-specific drills as appropriate
- Endurance training

Key Points

- ROM exercises are the highest priority after MUA.
- Frequent stretching throughout the day is often recommended.
- Ice after exercise and ROM sessions to control swelling.
- Monitor for increased pain, swelling, redness, or loss of motion and report concerns to the surgeon.