

Manipulation Under Anesthesia (Shoulder)

Physical Therapy After MUA for Adhesive Capsulitis · General Guideline

Few standardized published rehabilitation protocols exist for isolated shoulder MUA; this guideline reflects institutional protocols for manipulation/lysis of adhesions (UVA Sports Medicine) and review literature on MUA for frozen shoulder. The decisive factor is immediate, frequent motion: range gained under anesthesia is lost quickly unless aggressive therapy begins within 24-48 hours and continues at high frequency for the first 2 weeks.



AT A GLANCE

TIMELINE	~12 weeks total; the first 2 weeks largely determine the outcome
IMMOBILIZATION	None - no sling; the arm is used freely from the day of the procedure
KEY MILESTONES	PT within 24-48 h (ideally same or next day) · retain manipulation-gained ROM through week 2 · full/functional AROM by weeks 2-6 · strengthening from weeks 2-6
RETURN TO ACTIVITY	Normal daily use immediately as tolerated; full activity typically by 6-12 weeks

KEY PRECAUTIONS

- Do not immobilize - sling use encourages recurrent capsular stiffness; encourage functional use of the arm from day 1.
- Therapy must start within 24-48 hours of the manipulation, at 3-5 visits/week for the first 2 weeks, plus a home stretching program 3-5 times daily.
- End-range stretching should reproduce stretch discomfort, not a lasting pain flare; coordinate analgesia (and interscalene block or home devices per surgeon) to support early motion.
- Report signs of complication promptly - humeral fracture, dislocation, and cuff injury are rare but recognized risks of MUA.

PHASED REHABILITATION

PHASE 1 — IMMEDIATE AGGRESSIVE MOTION		Weeks 0–2
GOALS	- Retain the ROM obtained under anesthesia in all planes - Control post-manipulation pain and inflammation - Establish an independent, frequent home stretching program	
INTERVENTIONS	- Initiate supervised PT within 24-48 hours (same or next day when possible); 3-5 visits/week - PROM and AAROM to end range in all planes: flexion, abduction, ER at side and at 90°, IR/hand-behind-back - Rope-and-pulley, wand/cane stretches, table slides; sleeper and cross-body stretches - Light AROM within available range to encourage functional use - Pain modalities and cryotherapy after end-range work; NSAIDs/analgesia per surgeon - Home exercise program 3-5 times daily emphasizing sustained end-range holds	
CRITERIA TO ADVANCE	- ROM within ~10°-20° of values achieved under anesthesia, maintained across consecutive visits - Independent and compliant with home program - Pain controlled well enough to tolerate daily end-range stretching	

PHASE 2 — ROM CONSOLIDATION & STRENGTHENING		Weeks 2–12
GOALS	- Maintain and consolidate full/functional ROM as inflammation settles - Restore rotator cuff and periscapular strength and normal arm use	
INTERVENTIONS	- Continue daily end-range stretching; taper supervised visits as ROM proves stable - Shoulder isometrics progressing to isotonic rotator cuff work (bands: ER/IR, scaption) from weeks 2-6 - Periscapular strengthening: rows, prone I/Y/T, serratus activation - D1/D2 PNF resistance patterns and functional/overhead task retraining in later weeks - Progress to gym-based or independent maintenance program by weeks 6-12	
CRITERIA TO ADVANCE	- Full or plateaued functional AROM maintained without regression on consecutive visits - Strength grossly symmetric for daily and occupational demands - Discharged to independent maintenance stretching (recurrent stiffness warrants surgeon follow-up)	

GUIDING PRINCIPLES

This protocol follows criterion-based progression over rigid time-based advancement; phased rehabilitation balancing tissue healing with controlled stress application; objective milestones (ROM, strength LSI, functional testing) to guide phase transitions; individualization based on surgical findings, tissue quality, and patient factors; and ongoing surgeon–therapist communication throughout recovery.

REFERENCES

1. UVA Sports Medicine, University of Virginia. Post-Operative Rehabilitation Protocol: Lysis of Adhesions / Manipulation Under Anesthesia. <https://med.virginia.edu/orthopaedic-surgery/wp-content/uploads/sites/242/2021/06/LOA-MUA-with-tenodesis-or-RCR.pdf>
2. Kraal T, Beimers L, The B, Siersevelt I, van den Bekerom M, Eygendaal D. Manipulation Under Anaesthesia for Frozen Shoulders: Outdated Technique or Well-Established Quick Fix? EFORT Open Rev. 2019;4(3):98-109.

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