

AC Joint Reconstruction

Physical Therapy Protocol · Graft-Protective, Slow Early Progression

Synthesized from the Massachusetts General Hospital rehabilitation protocol for acromioclavicular joint reconstruction and the University of Cincinnati (Grawe) AC joint reconstruction protocol. Published AC reconstruction protocols vary widely (Cheema et al., 2021); this pathway uses a 6-week sling and conservative load caps to protect the graft/fixation while the ligament reconstruction matures.



AT A GLANCE

TIMELINE	~6 months of structured rehab; contact/collision sport commonly deferred 6–8+ months per surgeon
IMMOBILIZATION	Sling 6 weeks including sleep; remove only for hygiene and prescribed exercises
KEY MILESTONES	PROM 90° flexion / 30° ER by week 6 · PROM 140°/60° with active flexion $\geq 100^\circ$ by week 12 · full functional ROM by ~week 18
RETURN TO ACTIVITY	No lifting in Phase 1; ~1 lb cap weeks 7–12 and 2–3 lb cap weeks 13–18; return to sport is criterion-based with surgeon clearance (overhead/contact typically latest)

KEY PRECAUTIONS

- No cross-body (horizontal) adduction and no hand-behind-back / behind-the-body reaching in the early phases — both directly stress the reconstruction.
- No lifting, forceful pushing/pulling, or weight bearing through the arm in Phase 1; observe strict load caps thereafter (no objects >1 lb weeks 7–12; >2–3 lb and overhead weighted lifting deferred beyond week 12).
- Avoid downward traction on the arm (carrying bags/weights at the side) and shrug-type loading while the graft matures.
- Published protocols for this procedure are widely variable — confirm ROM limits, sling duration, and sport timeline with the operating surgeon.

PHASED REHABILITATION

PHASE 1 — PROTECTION		Weeks 0–6
GOALS	• Protect the reconstruction while ligament healing begins • Control pain and swelling; prevent excessive stiffness • Maintain elbow, wrist, hand, and scapular function	
INTERVENTIONS	• Sling 6 weeks including sleep; remove only for hygiene and prescribed exercises • Pendulums; supine assisted flexion limited to 90°; PROM ER to 30° in the scapular plane • No AROM of the shoulder; no reaching across the body or behind the back; no lifting or weight bearing through the arm • Submaximal rotational isometrics; scapular retraction and scapular ROM without resistance • AROM elbow, wrist, and hand; lower-extremity and cardiovascular conditioning (stationary bike) as tolerated • Cryotherapy and pain management	
CRITERIA TO ADVANCE	• PROM 90° shoulder flexion and 30° ER achieved • Tolerates exercise program without increased pain • Radiographic maintenance of reduction per surgeon	

PHASE 2 — MOTION RESTORATION & EARLY ACTIVATION		Weeks 7–12
GOALS	• Restore PROM to 140° flexion / 60° ER; active flexion ≥100° with good mechanics • Wean from sling and resume light waist-level ADLs • Minimize atrophy with low-load activation	
INTERVENTIONS	• Wean out of sling unless otherwise instructed • Countertop slides, wall walks, and AAROM to AROM flexion/scaption progression • Sidelying ER, prone rows, prone extension, standing scaption (unweighted to very light) • Light elastic-band scapular and cuff activation; continue isometrics • Restrictions: no objects >1 lb, no forceful pushing/pulling, no reaching behind the back, no overhead work	
CRITERIA TO ADVANCE	• PROM 140° flexion and 60° ER • Active flexion ≥100° with good scapulohumeral mechanics • No increase in pain or AC-joint tenderness between sessions	

PHASE 3 — PROGRESSIVE STRENGTHENING		Weeks 13–18
GOALS	- Achieve full functional ROM in all planes - Restore cuff and periscapular strength with graded resistance - Reintroduce light functional loading	
INTERVENTIONS	- Stretching progression including hands-behind-head; gradual restoration of remaining ROM - Resistance progression 1–5 lb: scaption, rows, W's, ER/IR at increasing abduction angles - Wall push-ups progressing toward incline push-ups; closed-chain scapular stabilization - Restrictions: no objects >2–3 lb early in phase, no overhead weighted lifting, no forceful pushing/pulling - Low-impact conditioning; jogging when approved	
CRITERIA TO ADVANCE	- Full functional ROM in all directions - Tolerates stretching and resistance progression without reactive pain - Strength adequate for waist- and chest-level ADLs	

PHASE 4 — ADVANCED STRENGTHENING & RETURN TO ACTIVITY		Weeks 19–26+
GOALS	- Restore strength, power, and endurance for occupational and sport demands - Return to overhead and sport-specific loading with objective clearance	
INTERVENTIONS	- Push-up progression to floor; weighted functional patterns; overhead strengthening progression - Plyometric and stabilization work: ball catches, rebounder throws, wall dribbles - Sport-specific training with graduated intensity (25–50% progressing as tolerated); interval throwing program if applicable - HEP transition for independent self-management	
CRITERIA TO ADVANCE	- Full pain-free ROM and strength appropriate to demand level - Independent self-management of symptoms and maintenance program - Contact/collision sport commonly deferred until 6–8+ months per surgeon - Surgeon clearance for unrestricted activity	

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. Massachusetts General Hospital Sports Physical Therapy. Rehabilitation Guideline for Acromioclavicular Joint Reconstruction. <https://www.massgeneral.org/assets/MGH/pdf/orthopaedics/sports-medicine/physical-therapy/rehabilitation-protocol-for-acromioclavicular-joint-reconstruction.pdf>
2. Grawe B (University of Cincinnati). AC Joint Reconstruction Rehabilitation Guidelines. <https://www.briangrawemd.com/pdf/brian-grawe-ac-joint-reconstruction-protocol.pdf>
3. Cheema SG, Hermanns C, Coda RG, et al. Publicly Accessible Rehabilitation Protocols for Acromioclavicular Joint Reconstruction Are Widely Variable. *Arthrosc Sports Med Rehabil*. 2021;3(2):e427-e433.

For clinical use by licensed physical therapists treating patients of Robert Pettit, MD. This document is a rehabilitation guideline, not a substitute for clinical judgment. Progression must be individualized based on intraoperative findings, tissue quality, and patient response. Scan the QR code for the current version of this protocol.