Hardware Removal (Shoulder)

Physical Therapy Protocol · General Guideline

Formal published rehabilitation protocols after isolated removal of shoulder-region hardware (e.g., clavicular plate) are limited; this guideline reflects surgeon post-operative instructions from orthopaedic practices (Reno Orthopaedic Clinic; Victorian Bone & Joint Specialists; Mammoth Orthopedic Institute). Because the bone is healed, motion is unrestricted early; the priorities are wound healing, comfort, and temporary protection of residual screw holes, which act as stress risers until they fill in.

AT A GLANCE

TIMELINE	2-6 weeks for most activities; impact/contact loading protected longer (often 6-12 weeks) while screw holes remodel
IMMOBILIZATION	Sling 2-3 days only, for comfort; no formal immobilization
KEY MILESTONES	Full PROM/AROM permitted immediately as tolerated · sutures removed at 10-14 days · unrestricted strengthening by weeks 4-6
RETURN TO ACTIVITY	Desk work within days; lifting >5 lb after ~4 weeks; contact/impact sport per surgeon clearance

KEY PRECAUTIONS

- Protect the incision: keep the dressing clean and dry for 10-14 days; no soaking/submersion until ~1 week after suture removal.
- Limit lifting to ~5 lb with the operative arm for the first 4 weeks; avoid strenuous activity for the first 2 weeks.
- Residual screw holes are temporary stress risers - avoid impact and contact loading until surgeon clearance (commonly 6-12 weeks after clavicle plate removal).

PHASED REHABILITATION

PHASE 1 — WOUND HEALING & MOTION	Weeks 0–2
GOALS	• Uncomplicated wound healing • Restore full, comfortable ROM (usually already present pre-op) • Pain control and early functional use
INTERVENTIONS	• Sling for 2-3 days only, as needed for comfort • Immediate full PROM and AROM in all planes as tolerated; pendulums early if guarded • Rotator cuff isometrics in multiple planes • Scapular retraction and periscapular activation with manual resistance • Ice for the first week, then as needed; wound care per surgeon • Light ADLs immediately; no lifting >5 lb
CRITERIA TO ADVANCE	• Incision healed / sutures removed at 10-14 days without complication • Full pain-free (or near pain-free) AROM • Pain controlled without narcotic medication

PHASE 2 — STRENGTHENING & RETURN TO ACTIVITY	Weeks 2–6+
GOALS	• Restore full strength for occupational and sport demands • Graded return to unrestricted activity
INTERVENTIONS	• Progressive isotonic rotator cuff and periscapular strengthening (bands to light weights) • Progressive weight training from weeks 4-6: machines first, advancing to free weights • Sport-specific training from ~week 6 (isokinetics, throwing progression for overhead athletes) • Gradual return to full activities from weeks 6-8 as tolerated; contact/impact sport per surgeon (often 6-12 weeks)
CRITERIA TO ADVANCE	• Full, pain-free ROM with strength grossly symmetric to the contralateral side • No tenderness or pain at the hardware-removal site with loading • Surgeon clearance before contact or high-impact 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. McCarthy M. Clavicle Hardware Removal Rehabilitation Protocol. Reno Orthopaedic Clinic. https://www.renoortho.com/wp-content/uploads/2023/02/clavicle-hardware-removal.pdf

2. Victorian Bone & Joint Specialists. Removal of Clavicle Plate: Post-Operative Care. https://www.vbjs.com.au/shoulder-treatments/post-op-clavicle-plate-removal

3. Mammoth Orthopedic Institute. Hardware Removal - Clavicle: Post-Operative Instructions. https://www.mammothortho.com/pdf/shoulder-hardware-removal-clavicle-postop.pdf

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.