

Arthroscopic Shoulder Surgery with PRP Augmentation



Physical Therapy Protocol · Symptom-Guided Progression with PRP-Specific Early Modifications

Base pathway follows the accelerated no-repair arthroscopy progression (Saint Louis University and University of Virginia protocols), modified per the Ohio State University Wexner Medical Center shoulder PRP rehabilitation guideline: a brief relative-rest window, NSAID avoidance around the PRP administration, and progression matched to the biologic healing phases (inflammation, proliferation, remodeling).

AT A GLANCE

TIMELINE	10–12 weeks; early progression intentionally slower than standard debridement rehab to respect the PRP inflammatory phase
IMMOBILIZATION	Sling for relative rest ~2–3 days post-procedure, then for comfort only; gentle motion resumes immediately
KEY MILESTONES	Gentle ROM and pendulums from day 1 · light ADLs (~1 lb) days 4–7 and ~5 lb by week 2 · isometrics weeks 2–4 · isotonics weeks 4–6 · plyometrics weeks 8–10
RETURN TO ACTIVITY	Return to sport at approximately 10–12 weeks with physician approval; symptom improvement may continue up to 3 months

KEY PRECAUTIONS

- NSAID avoidance around PRP: per the OSU guideline, avoid ibuprofen/naproxen for 2 weeks before and at least 1 week after PRP administration (many surgeons extend the post-PRP window — confirm duration with the surgeon). Acetaminophen is permitted; cardiac aspirin may continue.
- Respect the relative-rest window (first 2–3 days: sling while awake, gentle ROM only, no lifting), then avoid overhead lifting for the first week; an increase in soreness days 3–5 reflects the expected PRP inflammatory response.
- After the initial window, prolonged rest is counterproductive — progressive mechanical loading during the proliferative phase (weeks 1–8) is required for tissue remodeling.
- Advance only without reactive pain lasting >24 hours; if distal clavicle excision was performed, avoid aggressive cross-body adduction stretching for ~6 weeks.

PHASED REHABILITATION

PHASE 1 — RELATIVE REST & GENTLE MOTION (PRP INFLAMMATORY PHASE)		Days 0–7
GOALS	- Protect the PRP-treated tissue during the inflammatory phase - Control pain without NSAIDs - Prevent stiffness with gentle early motion	
INTERVENTIONS	- Rest day of procedure; sling while awake for days 2–3, then discontinue - Gentle PROM/AAROM and pendulum exercises 3–5x daily from day 1 - Days 4–7: resume daily activities at waist level; lifting limited to ~1 lb; no overhead lifting - Analgesia: acetaminophen as needed; no ibuprofen/naproxen (see precautions) - AROM elbow, wrist, and hand; scapular retraction; postural drills	
CRITERIA TO ADVANCE	- Expected post-PRP soreness settling (peak typically days 3–5) - Comfortable gentle ROM without escalating night pain - Independent with home motion program	

PHASE 2 — PROGRESSIVE MOTION & EARLY ACTIVATION (PROLIFERATIVE PHASE)		Weeks 1–4
GOALS	- Restore full AROM in all planes - Begin graded tissue loading — rest is contraindicated in this phase - Re-establish scapular control	
INTERVENTIONS	- Progress AAROM to full AROM: pulleys, wand, table slides, gentle end-range stretching - Weeks 1–2: lifting progressed to ~5 lb; scapular strengthening (retraction, rows, serratus punches) with light resistance - Weeks 2–4: submaximal rotator cuff isometrics in all planes, 1–2x daily - Upper-body ergometer (arm bike) for endurance - Aerobic conditioning: walking, stationary bike	
CRITERIA TO ADVANCE	- Full AROM with good scapular control - No reactive pain >24 hours after sessions - Tolerates isometric loading in all planes	

PHASE 3 — PROGRESSIVE STRENGTHENING		Weeks 4–8
GOALS	- Restore rotator cuff and periscapular strength - Progress concentric and eccentric loading under supervision	
INTERVENTIONS	- Weeks 4–6: isotonic cuff and periscapular program (bands/light dumbbells), increasing intensity with concentric/eccentric emphasis - High-repetition low-load progression: ER/IR at 20–30° abduction, scaption, prone row/extension series - Weeks 6–8: advance to a structured overhead-athlete dumbbell program (e.g., Throwers Ten) as tolerated - Rhythmic stabilization and PNF diagonals - Continue conditioning; monitor 24-hour symptom response to each progression	
CRITERIA TO ADVANCE	- Strength progressing without reactive pain >24 hours - Pain-free ADLs including light overhead tasks - Normal scapulohumeral rhythm with elevation	

PHASE 4 — ADVANCED LOADING & RETURN TO ACTIVITY (REMODELING PHASE)		Weeks 8–12
GOALS	- Restore power, endurance, and sport-specific capacity - Return to full activity with physician approval	
INTERVENTIONS	- Weeks 8–10: plyometric progression (two-hand chest/overhead throws to single-arm drills) and proprioceptive training of progressive difficulty - Conventional resistance training; work- or sport-specific task progression - Interval throwing or swimming program as applicable - Transition to independent maintenance HEP	
CRITERIA TO ADVANCE	- Full pain-free AROM and satisfactory strength for demand level - No reactive symptoms with plyometric and sport-specific loading - Return to sport at ~10–12 weeks with physician approval	

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. Ohio State University Wexner Medical Center Sports Medicine. Shoulder Ultrasound-Guided PRP Injection Rehabilitation Guideline. 2020. <https://medicine.osu.edu/-/media/files/medicine/departments/sports-medicine/prpshoulder2020.pdf>
2. Saint Louis University Department of Orthopaedic Surgery, Sports Medicine. Shoulder Subacromial Decompression and Distal Clavicle Excision Rehabilitation Protocol. <https://www.slu.edu/medicine/orthopaedic-surgery/sports-medicine/-pdf/shoulder-subacromial-decompression-and-distal-clavicle-excision.pdf>
3. University of Virginia Department of Orthopaedic Surgery. Post-operative Rehabilitation Protocol: General Shoulder Arthroscopy. <https://med.virginia.edu/orthopaedic-surgery/wp-content/uploads/sites/242/2023/01/Shoulder-arthroscopy-General.pdf>
4. Corban J, Shah S, Ramappa AJ. Current Evidence Based Recommendations on Rehabilitation Following Arthroscopic Shoulder Surgery. *Curr Rev Musculoskelet Med*. 2024;17(7):247-257.

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.