

Anatomic Total Shoulder Arthroplasty

Physical Therapy Protocol · ASSET Consensus & APTA CPG–Based

Based on the ASSET consensus statement for anatomic TSA and the APTA clinical practice guideline for glenohumeral joint osteoarthritis.



AT A GLANCE

TIMELINE	12+ weeks structured rehab; golf/tennis ~4 months; full sport ≥6 months
IMMOBILIZATION	Sling 24/7 through weeks 4–6 (off for grooming and HEP 3–5×/day)
ROM EXPECTATIONS (OA)	~140–150° elevation, 50–60° ER
EVIDENCE NOTE	Immobilization in neutral rotation may reduce early night pain and improve long-term ER

KEY PRECAUTIONS

- Phase 1: no active shoulder elevation, no hand-behind-back, no ER at 90°.
- Keep weight training below shoulder level and anterior to the frontal plane.
- Avoid impact loading (bench press, sledgehammer-type activity).

PHASED REHABILITATION

PHASE 1 — PROTECTION		POD 1 to Weeks 4–6
GOALS	- Protect subscapularis repair - Establish protected passive motion	
INTERVENTIONS	- Sling 24/7 (remove for grooming and home exercises 3–5 times/day) - No active shoulder elevation; no hand behind back; no ER at 90° - Pendulums; active elbow/wrist/hand; scapular retraction - PROM: elevation to 120° in scapular plane, ER to 30° at side - Non-impact aerobics (walking; stationary bike when incision healed)	
CRITERIA TO ADVANCE	- Pain <3/10 with PROM - Healed incision - Surgeon clearance	

PHASE 2 — ACTIVE MOTION RECOVERY		Weeks 4–6 to 12
GOALS	AROM equal to PROM without pain	
INTERVENTIONS	- Discontinue sling - Gentle stretching beyond Phase 1 limits; progress AAROM → AROM - Jackins active elevation progression (supine → inclined → upright) - ER at 90° abduction to 60° limit; gentle IR behind back - Scapular AROM against gravity (prone extension, horizontal abduction) - Aerobics: elliptical without UE resistance; lower-body weight training	
CRITERIA TO ADVANCE	- AROM = PROM - No pain	

PHASE 3 — STRENGTHENING & RETURN TO FUNCTION		Week 12+
GOALS	Functional strength; graded return to recreation	
INTERVENTIONS	- Light resistance strengthening (deltoid, rotator cuff, scapular stabilizers) - Weight training below shoulder level, anterior to frontal plane - CKC exercises (planks, yoga) permitted - Golf/tennis initiated ~4 months; full return to sport not before 6 months	
CRITERIA TO ADVANCE	- ROM expectations for OA: ~140–150° elevation, 50–60° ER - Pain-free functional use for ADLs and recreation	

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. Kennedy JS, Garrigues GE, Pozzi F, et al. The ASSET Consensus Statement on Rehabilitation for Anatomic Total Shoulder Arthroplasty. J Shoulder Elbow Surg. 2020;29(10):2149-2162.
2. Michener LA, Heitzman J, Abbruzzese LD, et al. Physical Therapist Management of Glenohumeral Joint Osteoarthritis: APTA Clinical Practice Guideline. Phys Ther. 2023;103(6):pzad041.
3. 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.