

Anatomic Total Shoulder Arthroplasty Rehabilitation

Saint Louis University – SSM Health Physical Therapy Orthopedic Residency
in Collaboration with Dr. Scott Kaar and Dr. Christopher Kim

Physician Referral for Physical Therapy

Patient Name:

Date:

Referring DX: S/P Anatomic Total Shoulder Arthroplasty

Recommended Frequency: 1 – 3 visits/ wk Total Duration: ~4 months



SLUCare[®]
Physician Group

These guidelines, treatments, and milestones have been established to assist in guiding rehabilitation based on the most current available evidence. They are not intended to be substitute for sound clinical judgement with consideration of the individual contextual features of the patient and the demands of various functions/sports.

Pre-Physical Therapy / Home Therapy Phase (Approximately Weeks 0 – 2)

Milestone to advance to next phase: MD appointment for follow-up

Sling or immobilizer at all times¹ except to exercise, and shower/bathe

Home program: perform minimum of 3 times/day: AROM cervical spine, elbow, wrist, hand

Initiation of mobility – Phase 1 (Approximately Weeks 2 – 6)

Milestone to advance to next phase: Passive ER to 30°
Passive FF in scapular plane to 130°
Discontinue use of sling or immobilizer
Minimal pain and inflammation

Suggested Interventions

Scar mobility, Diaphragmatic breathing, MLD of the UE for edema management²⁻³

PROM

Recommended precautions:

Limit passive ER to 30°, horizontal abduction and extension to neutral⁴⁻⁶

Limit passive FF to the scapular plane

Limit passive IR to the scapular plane

Aerobic conditioning⁷

Scapular retraction⁸

Progression Toward Functional ROM Phase 2 (Approximately Weeks 6-10)

Milestone to advance to next phase: Passive FF to 150°
Passive ER to 60°
Active supine FF to 90°, ER to 45°⁹
Optimal humeral head control
Minimal to no pain with light ADLs

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Suggested Interventions:

Passive & Active assisted ROM¹⁰

Recommended precautions:

FF in scapular plane (wall slides⁸ wand exercises, pulleys)¹¹

ER (gentle beyond 30° to respect subscapularis healing)

FF AROM in supine

Manually resisted scapular side-lying stabilization exercises¹²

Initiate PNF patterning supported such as wall slides¹³

Isometrics:

Deltoid in neutral

ER (modified neutral) ROM < 30°

IR (modified neutral)

Aerobic conditioning including UBE⁷

Optimizing Functional Range of Motion/Early Strengthening Phase 3 (Approximately Weeks 10-16)

Milestone to advance to next phase: Axioscapular muscle strength grades 4/5 MMT
Optimal scapulohumeral rhythm to 90° elevation
Minimal pain and inflammation with application of the soreness rules¹⁴ for intensity of exercise

Suggested Interventions

Progress ROM as tolerated¹¹

Uniplanar flexibility exercises into extension and internal rotation

PNF patterning

Recommended precaution: in supine or supported until week 12¹⁵

Isotonic strengthening:

Emphasis on axioscapular muscles (scapular rows¹⁶)

Continued attention to humeral head control and scapulohumeral rhythm with as load progresses

Return to Full Function Phase 4 (Approximately Weeks 16 to Discharge)

Milestone to discharge: Optimal ROM
Full Independent ADLs
Optimal scapulohumeral rhythm to > 120° elevation
Home program with dosing per application of the soreness rules¹⁴ for intensity of exercise

Suggested Interventions

Flexibility exercises: towel stretch (IR), posterior capsule stretch

Progressive resistive strengthening:

Dumbbells

Progressive resistive equipment

Elastic band IR/ER

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For questions regarding the patient’s medical care, new orders, or insurance questions please contact your physician's office directly.

For additional questions, comments, or concerns regarding the implementation of these physical therapy guidelines, please contact:
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Please respond to our anonymous survey regarding these guidelines to assist in improving patient care



and advocacy. https://slu.az1.qualtrics.com/jfe/form/SV_bpX7Z9AaVTzGblj

Appendices of referenced assessments

Soreness Rules <small>Adapted from Fees et al. 1998¹⁴</small>	
Criterion	Action
1. Soreness during warm-up that continues	2 days off, drop down 1 step
2. Soreness during warm-up that goes away	Stay at step that led to soreness
3. Soreness during warm-up that goes away from redevelops during session	2 days off, drop down 1 step
4. Soreness the day after lifting (not muscle soreness)	1 day off, do not advance program to the next step
5. No soreness	Advance 1 step per week or as instructed by healthcare professional

References:

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- 3 Feltman B. Case Report – Shoulder hemiarthroplasty with pre-existing ipsilateral postmastectomy lymphedema: Physical Therapy treatment and outcomes. *Rehabilitation Oncology*; 2007: 25(3): 17- 28.
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