

Pediatric Rehabilitation Protocol for Posterior Bankart Repair

This protocol is intended to guide clinicians through the post-operative course for posterior Bankart repair. This protocol is time based (dependent on tissue healing) as well as criterion based. Specific intervention should be based on the needs of the individual and should consider exam findings and clinical decision making. The timeframes for expected outcomes contained within this guideline may vary based on surgeon's preference, additional procedures performed, and/or complications. If a clinician requires assistance in the progression of a post-operative patient, they should consult with the referring surgeon.

The interventions included within this protocol are not intended to be an inclusive list. Therapeutic interventions should be included and modified based on the progress of the patient and under the discretion of the clinician.

Considerations for the Post-operative Posterior Bankart Repair

Many different factors influence the post-operative posterior Bankart repair rehabilitation outcomes, including preoperative tissue quality, shoulder range of motion, arm strength, and function. Other individual considerations include patient age and co-morbidities, such as: increased BMI, smoking, and diabetes. It is recommended that clinicians collaborate closely with the referring physician regarding specific range of motion or loading guidelines for each individual case.

If the patient develops a fever, unresolving numbness/tingling, excessive drainage from the incision, uncontrolled pain, or any other symptoms you have concerns about contact the referring physician.

PHASE I: IMMEDIATE POST-OP (0-4 WEEKS AFTER SURGERY)

Rehabilitation	Allow healing of repaired capsule
Goals	Initiate early protected and restricted range of motion (ROM)
	Decrease pain/inflammation
Sling	Use of sling as instructed by your surgeon, typically 4-6 weeks
Precautions	No active ROM
	No internal rotation
	No horizontal adduction
	No upper extremity weight bearing
	No overhead activities
	No lifting or carrying objects
	No pushing or pulling
Interventions	Pain/swelling management
	Ice, compression, and modalities as needed
	Manual therapy
	Grade 1-2 traction and inferior glides in loose packed position to help manage pain and muscle guarding
	Passive Range of Motion
	Supine external rotation to tolerance
	Supine forward elevation (limited to 90 deg until 2 weeks post-op and limited to 120 deg until 4
	weeks post-op)
	Pendulums

Strengthening
• Isometrics: Internal and external rotation in neutral, flexion, extension and abduction
Rhythmic stabilization and proprioceptive exercises with PT
Scapular retraction
Ball squeeze exercise

PHASE II: INTERMEDIATE POST-OP (5-6 WEEKS AFTER SURGERY)

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Gradual increase in ROM
Initiate active assisted/active ROM
Improve strength
Decrease pain/inflammation
Wean from sling
No internal rotation behind back
No horizontal adduction
No upper extremity weight bearing
No overhead activities
No lifting or carrying objects
No pushing or pulling
Active Assisted/Active ROM
• IR with dowel: limited to 30 deg in plane of scapula
• <u>Flexion with dowel</u> : limited to 140 deg
ER with dowel: to tolerance
Strengthening
• <u>Side-lying ER</u>
• <u>Prone row</u>
Prone extension
Standing forward flexion to 90 deg
• <u>Biceps curl</u>
Resistance band exercises in neutral abduction: <u>ER</u> , <u>IR</u> (IR limited to neutral)
Manual Therapy
Grades 1-3 oscillatory mobs to GH joint. Caution not to over-stress repaired structures
Shoulder flexion ROM to 120-140 deg
Pain/inflammation controlled
Compliant with post-op precautions

PHASE III: LATE POST-OP (7-12 WEEKS AFTER SURGERY)

Rehabilitation	Gradually continue to restore ROM
Goals	Increase strength
	Improve neuromuscular control
	Enhance proprioception and kinesthesia
Precautions	Discharge sling
	Continue to avoid excessive/forceful horizontal adduction and internal rotation
	 IR behind back to beltline only
	UE weight-bearing permitted, but no full bodyweight push-ups

Additional	Range of Motion/Mobility
Interventions	PROM and AROM ER @ 90 deg abduction to tolerance
*Continue with	PROM, AROM, and dowel AAROM shoulder flexion to tolerance
Phase I-II	PROM and AROM IR in plane of scapula limited to 60 deg
Interventions	PROM and AROM IR @ 90 deg abduction limited to 45 deg until week 10
	 Progress to a maximum of 65 deg until week 12
	• <u>Pulleys</u>
	• <u>Wall slides</u>
	Hands-behind-head stretch
	Strengthening
	Band exercises: <u>Dynamic hug</u> , <u>bilateral ER/'W's</u> , <u>biceps curl</u> , <u>rows</u> , <u>forward serratus punch</u> ,
	diagonal flexion and extension patterns, ER/IR @ 90 deg
	• <u>Side-lying scaption</u>
	• Prone 'T's, 'Y's
	• <u>Standing scaption</u>
	Rhythmic stabilization and proprioception drills
	Wall push-ups (at week 12)
Criteria to	ER @ 90 deg abduction to 85-90 deg, 110-115 deg for throwers
Progress	IR @ 90 deg abduction to 60-65 deg
	IR in plane of scapular to 60 deg
	Shoulder flexion to 165 deg

PHASE IV: TRANSITIONAL (3-5 MONTHS AFTER SURGERY)

Rehabilitation	Protect the ligament repair
Goals	Regain full range of motion
	Continue strengthening
	Gradual return to full activity
Additional	Range of Motion/Mobility
Interventions	Horizontal adduction stretching
*Continue with	ER @ 90 deg abduction stretching
Phase II-III	Behind back IR AROM and AAROM with towel
interventions	
	Strengthening
	• Initiate weight training with machine resistance: <u>front pull downs</u> , <u>seated row</u>
	Add <u>seated bench press</u> at week 16
	Closed kinetic chain: <u>ball on wall</u>
	 Add <u>push-up progression with unstable surface</u> at week 20
	<u>PNF manual resistance</u> with PT
Criteria to	Full shoulder ROM
Progress	80% strength of ER and IR compared to contralateral shoulder with dynamometry testing
	• 80% or > performance with field testing

PHASE V: EARLY RETURN TO SPORT (6-7 MONTHS AFTER SURGERY)

Rehabilitation	Full shoulder strength
Goals	Unrestricted activities
	Initiation of interval return to sport training at 28 weeks
Additional	Range of Motion/Mobility
Interventions	Soft tissue stretching to restore or maintain full shoulder ROM
*Continue with	
Phase II-IV	Strengthening
interventions	• Plyometric exercises: rebounder throws, overhead ball dribbles, deceleration catches, standing
	ball drops, prone 90/90 ball drops
	 Progressive weight training involving compound movements and larger muscle groups
Criteria to	• 90% or > strength of ER and IR compared to contralateral shoulder with dynamometry testing
Progress	• 90% or > performance with field testing
	• 90% or > on reported outcome measures (DASH, Penn Shoulder Score)

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Contact	Please email MGHSportsPhysicalTherapy@partners.org with questions specific to this protocol	

References:

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