



Posterior Bankart Repair Rehabilitation Guideline

This rehabilitation program is designed to return the individual to their activities as quickly and safely as possible. It is designed for rehabilitation following arthroscopic posterior Bankart repair. Modifications to this guideline may be necessary depending on physician-specific instructions, the location of the repair, concomitant injuries or procedures performed. This evidence-based Arthroscopic Posterior Bankart Repair Rehabilitation Guideline is criterion-based. Time frames and visits in each phase will vary depending on many factors including patient demographics, goals and individual progress. This guideline is designed to progress the individual from rehabilitation to full sport and activity participation. The therapist may modify the program appropriately depending on the individual's goals for activity following arthroscopic posterior Bankart repair.

This guideline is intended to provide the treating clinician with a frame of reference for rehabilitation. It is not intended to substitute clinical judgment regarding the patient's post-operative care based on exam or treatment findings, individual progress and/or the presence of concomitant procedures or post-operative complications. If the clinician should have questions regarding post-operative progression, they should contact the referring physician.

General Guidelines/Precautions:

- The posterior capsule is stressed with internal rotation; thus, internal rotation must be limited during the early phases of rehabilitation. Do not allow or perform range of motion (ROM) stretching beyond goals, especially internal rotation both in neutral and abducted for six to eight weeks.
- AROM initiated at six weeks, per physician.
- Avoid posterior-glide joint mobilizations for the first eight weeks.
- Return-to-play for non-contact athletes is around four to five months (per physician discretion).
- Return-to-play for contact athletes is around six months (per physician discretion).

Arthroscopic Posterior Bankart Repair Rehabilitation Guideline (21-28 weeks to expected D/C)

PHASE	SUGGESTED INTERVENTIONS	GOALS/MILESTONES FOR PROGRESSION
<p>Phase I Patient Education Phase (pre-operative)</p> <p>Expected visits: 1-3</p>	<p>Discuss:</p> <ul style="list-style-type: none"> Anatomy, existing pathology, post-op rehab schedule, bracing and expected progressions. <p>Instruct on pre-op exercises:</p> <ul style="list-style-type: none"> Strength and ROM progressions as tolerated. <p>Immediate post-operative instructions:</p> <ul style="list-style-type: none"> Maintain the use of a sling at all times until physician instructs to decrease. Brace is worn for 4-6 weeks. Avoid getting incision sites wet for 48 hours. 	<p>Goals of Phase:</p> <ul style="list-style-type: none"> Improve ROM and strength prior to surgery. Appropriate expectation framework for post-operative rehabilitation. <p>Criteria to Advance to Next Phase:</p> <ul style="list-style-type: none"> Progress to Phase II post-operatively.
<p>Phase II Maximum Protection Phase</p> <p>Weeks 0-4</p> <p>Expected: 4-8</p>	<p>Specific Instructions:</p> <ul style="list-style-type: none"> Sutures are removed at 10-14 days (per physician discretion). Maintain the use of a brace at all times until physician instructs to decrease at approx. 4-6 weeks after surgery. Sleep in brace. No activities above head or across body. No lifting. <p>Suggested Treatments:</p> <ul style="list-style-type: none"> Modalities: Pain control modalities as indicated. <ul style="list-style-type: none"> Continue icing three times per day or as needed. No heat until one week after surgery. Exercises: <ul style="list-style-type: none"> Wrist and hand AROM. PROM: <ul style="list-style-type: none"> Elbow PROM to end ranges to maintain mobility. Flexion to 90° Abduction to 60° as tolerated ER to tolerance in scapular plane at 45° to 60° of abduction. No Internal Rotation for 6 weeks. Submax, pain-free shoulder and scapular isometrics at two weeks: <ul style="list-style-type: none"> Flexion/Abduction/Ext/IR/ER Hand gripping exercises (putty, squeeze balls). AROM cervical spine. Avoid closed kinetic chain exercises. 	<p>Goals of Phase:</p> <ul style="list-style-type: none"> Provide environment of proper healing of repair. Prevention of post-operative complications. Retard muscle atrophy. Improve PROM. Diminish pain and inflammation. Independence with home exercise program. <p>Criteria to Advance to Next Phase:</p> <ul style="list-style-type: none"> Patient has met upward limits of PROM for this phase. Patient is four weeks post-surgery.

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<p>Phase III Protected Motion Phase</p> <p>Weeks 4-6</p> <p>Expected visits: 2-6</p>	<p>Specific Instructions:</p> <ul style="list-style-type: none"> • No carrying or lifting heavy objects. • Continue sleeping in elevated position with sling until comfortable to lay flat. • Continue use of sling until physician discharge (approx. 4-6 weeks) • No internal rotation for six weeks. • Avoid posterior joint mobilizations for eight weeks. <p>Suggested Treatments:</p> <ul style="list-style-type: none"> • Modalities: Pain control modalities as needed. • PROM: Continue to progress PROM <i>as tolerated</i>. <ul style="list-style-type: none"> • Flexion/Scaption to 90° by week four, 125° by week six. • Abduction to 90° • ER in scapular plane to tolerance, working towards 90° abduction. • AAROM: (Begin at week 3) <ul style="list-style-type: none"> • Progressions within PROM limits listed above. • Gentle joint mobilizations if needed: <ul style="list-style-type: none"> • Inferior and anterior glides at week 5-6. 	<p>Goals of Phase:</p> <ul style="list-style-type: none"> • Gradual increase in ROM. • Improve arthrokinematics. <p>Criteria to Advance to Next Phase:</p> <ul style="list-style-type: none"> • Patient has met upward limits of PROM for this phase. • Patient has met upward limits of AAROM for this phase.
<p>Phase IV Intermediate Phase</p> <p>Weeks 6-12</p> <p>Expected visits: 12-18</p>	<p>Specific Instructions:</p> <ul style="list-style-type: none"> • Continue previous exercises. • Continue use of ice and heat as needed. • Avoid horizontal abduction behind body. • Start progressing horizontal adduction across the body at week eight. • No push-up exercises until week 12. <p>Suggested Treatments:</p> <ul style="list-style-type: none"> • Manual Therapy: GHJ mobilizations to improve ROM • PROM: Continue to progress as tolerated. <ul style="list-style-type: none"> • IR in scapular plane to 45° at week eight, 65° at week ten. • IR and ER at 90° at week eight gently working towards equal total rotational motion at end of phase. • AROM: <ul style="list-style-type: none"> • Initiate at week six. <p>Strengthening: Initiate light scapular and rotator cuff strength below shoulder height at 6-8 weeks.</p> <p>Exercise Examples:</p> <ul style="list-style-type: none"> • Continue with gleno-humeral rhythmic stabilization drills. • Continue all stretching exercises. • Side-lying ER. • Light Theratube exercises for cuff start at 6-8 weeks. • Initiate the Throwers Ten program with attention to proper scapular control. <p>Other Activities:</p> <ul style="list-style-type: none"> • May initiate UBE at seven weeks with light resistance. 	<p>Goals of Phase:</p> <ul style="list-style-type: none"> • Near full PROM expected by week 12 except for IR. • Preserve the integrity of the surgical repair. • Increase functional activity without soft tissue irritation. • Decrease pain and inflammation. • Initiate strength progression. <p>Criteria to Advance to Next Phase:</p> <ul style="list-style-type: none"> • Near full and non-painful PROM. • No pain or tenderness.

<p>Phase V <i>Advanced Strengthening and Eccentric Control Phase</i></p> <p>Weeks 13-24</p> <p>Expected visits: 12-18</p>	<p>Suggested Treatments:</p> <ul style="list-style-type: none"> • Continue all strengthening and mobility exercises from prior phase. • Encourage HEP progression and compliance. • Continue to progress throwing motion, as able (especially ER). • Resisted sport activity. • Progressive plyometric activities, both open and closed chain. • Endurance training. <p>Exercise Examples:</p> <ul style="list-style-type: none"> • Pre-throwing drills. • Progression of total body strengthening program. • High-speed band exercises. • Weight-bearing: <ul style="list-style-type: none"> • Weight-bearing quadruped proprioceptive exercises at week 10. • Wall push-ups at week 12. • Incline push-up progressing towards neutral at week 13. • Modified-depth push-up with a plus, DB floor press at week 14. • Full push-up at week 15. • DB bench, barbell bench, shoulder press at week 16, progressively increasing depth to full at six months. • Plank progressions at 16 weeks. • PNF patterns with bands, cable column and manual resistance. • Plyometrics: trampoline plyo chest pass, side and overhead toss, 90°/90° toss, 90°/90° ball drop. <p>Other Activities:</p> <ul style="list-style-type: none"> • Begin Interval Throwing Program or appropriate sport-specific interval program. 	<p>Criteria for Discharge:</p> <ul style="list-style-type: none"> • Establish and maintain full shoulder AROM. • Progress back to functional activities. • Less than 10% strength deficit for all motions. • Satisfactory outcome measure scores (FOTO, Kerlan-Jobe, Quick DASH, etc.). • Clearance by physician for return to full activity. • Satisfactory results on UE testing (refer to UE testing guideline).
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REFERENCES:

1. Dockery ML, Wright TW, LaStayo PC. Elec-tromyography of the shoulder: an analysis of passive modes of exercise. Orthopedics. 1998; 21:1181-1184.
2. Fried JW, Hurley ET, Duenes ML, Manjunath AK, Virk M, Gonzalez-Lomas G, et al. Return to play after arthroscopic stabilization for posterior shoulder instability—a systematic review. Arthroscopy, Sports Medicine, and Rehabilitation. 2021;3.
3. Goldenberg BT, Goldsten P, Lacheta L, Arner JW, Provencher MT, Millett PJ. Rehabilitation Following Posterior Shoulder Stabilization. Int J Sports Phys Ther. 2021;16(3):930-940. Published 2021 Jun 1. doi:10.26603/001c.22501
4. Itoi E, Hatakeyama Y, Urayama M, Pradhan RL, Kido T, Sato K. Position of immobilization after dislocation of the shoulder. A cadaveric study. The Journal of Bone & Joint Surgery. 1999; 81:385-390.
5. Itoi E, Sashi R, Minagawa H, Shimizu T, Wakabayashi I, Sato K. Position of immobilization after dislocation of the glenohumeral joint: a study with use of magnetic resonance imaging. The Journal of Bone & Joint Surgery. 2001;83:661-667.
6. Kim SH, HA KI, Jung MW, Lim MS, Kim YM, Park JH. "Accelerated Rehabilitation after Arthroscopic Bankart Repair for Selected Cases: A Prospective Randomized Clinical Study." Arthroscopy. 2003;19(7):722-731.
7. Koczan B, Stryder B, Mitchell C. Postoperative rehabilitation of posterior glenohumeral joint instability surgery: A systematic review. Sports Medicine and Arthroscopy Review. 2021;29:110-8.
8. Long JL, Ruberte Theile RA, Skendzel JG, et al. Activation of the shoulder musculature during pendulum exercises and light activities. J Orthop Sports Phys Ther. 2010 Apr;40(4):230-7.
9. Manske RC, Davies GJ. Postrehabilitation outcomes of muscle power (torque-acceleration energy) in patients with selected shoulder dysfunctions. Journal of Sports Rehab. 2003;12(3):181-198.
10. Moseley JB, Jobe FW, Pink M, Perry J, Tibone J. EMG analysis of the scapular muscles during a shoulder rehabilitation program. American Journal of Sports Medicine. 1992;20;128-134.
11. Reinold MM, Gill TJ, Wilk KE, Andrews JR. Current concepts in the evaluation and treatment of the shoulder in overhead throwing athletes, part 2: injury prevention and treatment. Sports Health. 2010;2(2):101-115.
12. Stein DA, Jazrawi L, Bartolozzi AR. Arthroscopic stabilization of anterior shoulder instability: A review of the literature. Arthroscopy. 2002; 18:912-924.
13. Townsend H, Jobe FW, Pink M, Perry J. Electromyographic analysis of the glenohumeral muscles during a baseball rehabilitation program. American Journal of Sports Medicine. 1991; 19:264-272.
14. Tyler TF, Nicholas SJ, Seneviratne AM. (2006). The bankart lesion. In RC Manske (Ed.), Postsurgical orthopedic sports rehabilitation knee and shoulder (pp. 563-581). Missouri: Mosby Elsevier.
15. Wilk, KE, Macrina LC. Nonoperative and postoperative rehabilitation for injuries of the throwing shoulder. Sports Med Arthrosc Rev. 2014;22(2):137-150.
16. Wilk, KE, Obama P, Simpson III, CD, Cain EL, Dugas J, Andrews JR. Shoulder injuries in the overhead athlete. J Orthop Sports Phys Ther. 2009;39(2):38-54.

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