Shoulder Arthroscopy - Arthroscopic Bankart Repair
Evidence-Based Rehabilitation Protocol

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Criteria-based progression following uncomplicated arthroscopic anterior capsulolabral (Bankart) repair. Remplissage, significant bone loss, open stabilization/Latarjet, rotator cuff repair, SLAP repair, or other concomitant procedures require procedure-specific modification.

Phase	Timing*	Goals / criteria	Rehabilitation focus / precautions
1. Protection / early motion	0-2 weeks	Protect capsulolabral repair; control pain/inflammation; maintain elbow/wrist/hand ROM; begin safe-zone shoulder motion without apprehension.	**Sling:** full time except hygiene/exercises. **ROM:** PROM/AAROM in scapular plane; flexion/scaption to ~90° and ER at side to ~20° as tolerated. No aggressive stretching. Avoid abduction + ER, extension behind body, horizontal abduction, supporting body weight through arm, or active ER against resistance. Scapular setting, pendulums, hand/wrist/elbow ROM, cryotherapy.
2. Protected ROM	2-4 weeks	Gradually improve pain-free elevation and ER while maintaining repair protection; good scapular mechanics.	Progress flexion/scaption toward ~110-120° and ER at side toward ~30°. Gentle AAROM/PROM, pulleys if controlled, submaximal pain-free isometrics for deltoid/scapular musculature. Continue sling outside therapy/home exercises. Avoid forced ER or combined abduction/ER.
3. Restore motion / initiate strength	4-6 weeks	Minimal pain; improving ROM without apprehension; begin transition out of sling; establish rotator cuff/scapular activation.	Wean/discontinue sling around 4-6 weeks as control and comfort allow. Progress elevation toward ~140-150° and ER toward ~45-55°. Begin active ROM and light resisted ER/IR with arm at side, rows, serratus work, scaption below symptom threshold. **Resisted shoulder strengthening generally begins around 6 weeks.**
4. Strength / full functional ROM	6-12 weeks	Progress toward full, non-apprehensive functional ROM by ~10-12 weeks; normalized scapulohumeral rhythm; increasing cuff/scapular strength.	Progress bands/cables/free weights, rows, ER/IR, scaption, serratus and lower trapezius work, closed-chain stabilization, rhythmic stabilization, wall push-up -> incline push-up. Gradually introduce ER at increasing abduction angles; avoid forceful 90/90 ER until adequate healing/control.
5. Advanced strength / power	12-16+ weeks	Full pain-free ROM; no instability/apprehension with functional positions; strength/endurance approaching ≥80-90% of contralateral side.	Advance push-up/plank variations, overhead strengthening, perturbation training, medicine-ball drills and progressive plyometrics. Begin higher-speed ER/IR and overhead patterns. Lower-body running/conditioning may progress when arm swing is comfortable and shoulder remains quiet.
6. Sport-specific progression	4-6 months	Full ROM; no pain or apprehension; objective cuff strength/endurance ≥90% LSI; good dynamic stability and functional testing.	Progress throwing/overhead interval program, advanced plyometrics, reactive stabilization and contact preparation. Noncontact sport may resume when functional criteria are met. Overhead and collision athletes require graded exposure before unrestricted play.
7. Unrestricted return to sport	Typically 5-6+ months; often 6+ months for collision/overhead sport	No pain/apprehension; full sport-specific ROM; ≥90% strength and endurance symmetry; appropriate ER/IR balance; functional testing passed; full practice tolerated; confidence/psychological readiness.	Progress noncontact -> controlled contact/throwing -> full practice -> competition. Time alone is insufficient. Collision/contact and high-demand overhead athletes should demonstrate successful sport-specific loading without recurrent apprehension.

*Timelines are guardrails. Progress based on healing, symptoms, apprehension, ROM, strength, scapular mechanics, functional testing and sport demands. Do not force external rotation simply to meet a calendar milestone.

Key Early Precautions

• **Sling:** wear continuously early except hygiene and prescribed exercises; typically wean between 4 and 6 weeks depending on comfort, control, and operative findings.

• **External rotation:** restore gradually. Avoid aggressive ER stretching early, particularly in abduction, to protect the anterior-inferior capsulolabral repair.

• **Abduction + external rotation:** avoid the apprehension position early. Introduce 90/90 ER gradually only after adequate healing, strength and control.

• **Extension / horizontal abduction:** avoid excessive extension behind the body and aggressive horizontal abduction during the protection phase.

• **Loading:** no pushing up from a chair/bed, heavy carrying, or supporting body weight through the operative arm during early healing.

• **Pain / inflammation:** use ice/cryotherapy and activity modification. Rehabilitation should not produce persistent pain or a meaningful next-day increase in irritability.

Procedure-Specific Modifications

• **Remplissage:** may warrant slower restoration of external rotation and overhead/throwing progression because of posterior capsulotenodesis/infraspinatus involvement.

• **Significant glenoid bone loss or bony Bankart fixation:** progression should reflect fixation quality and surgeon-specific restrictions.

• **Concomitant SLAP or rotator cuff repair:** follow the more restrictive protection and strengthening timeline.

• **Revision stabilization / generalized laxity:** consider a more conservative ROM and return-to-contact progression.

Objective Strength & Functional Testing

• **Rotator cuff strength:** objectively test ER and IR with handheld dynamometry or isokinetic dynamometry when available. Aim for ≥90% limb symmetry before unrestricted sport.

• **ER/IR balance:** assess external- to internal-rotation strength ratio in addition to side-to-side symmetry; approximately two-thirds (≥66%) is a commonly used benchmark in athletic testing.

• **Endurance:** include repetitive ER/IR endurance testing, particularly for overhead athletes; target ≥90-95% symmetry for return to high-demand sport.

• **Closed-chain function:** use the Closed Kinetic Chain Upper Extremity Stability Test (CKCUEST), Upper Quarter Y-Balance, push-up/plank tolerance, or comparable testing appropriate to the athlete.

• **Power:** seated single-arm shot-put or medicine-ball testing can quantify unilateral upper-extremity power; target ≥90-95% symmetry when applicable.

• **Movement quality:** observe scapular control, trunk compensation, apprehension, and humeral-head control during pressing, reaching, deceleration and overhead tasks.

Suggested Return-to-Sport Criteria

• No pain, instability episodes, or clinically meaningful apprehension.

• Full, pain-free, sport-specific ROM without forced end-range stretching.

• ER and IR strength ≥90% of the uninvolved shoulder by handheld or isokinetic dynamometry.

• ER/IR strength ratio appropriate for sport, commonly ≥66%.

• ER/IR endurance ≥90-95% symmetry for high-demand athletes.

• Closed-chain stability and upper-quarter functional testing at or near normative values and ≥90% symmetry when a bilateral comparison is valid.

• Upper-extremity power testing (e.g., seated single-arm shot-put) ≥90-95% symmetry when appropriate.

• Ability to perform push, pull, press, decelerate and overhead tasks with excellent scapular/trunk control.

• For throwers: completion of an interval throwing program without pain or recurrent apprehension.

• For collision/contact athletes: tolerate progressive controlled contact and full practice before competition.

• Psychological readiness/confidence, with attention to residual apprehension or kinesiophobia.

Conditioning & Running Progression

Timing	Conditioning progression
0-4 weeks	Walking; stationary bike with sling/protection as appropriate.
4-8 weeks	Progress walking, bike and lower-body conditioning while avoiding jarring arm motion or weight bearing through operative arm.
8-12 weeks	Consider easy jogging when gait/arm swing is comfortable, shoulder is pain-free at rest and with normal arm swing, and there is no next-day symptom increase.
12+ weeks	Progress continuous running, intervals and lower-body agility. Avoid falls/contact and aggressive upper-body sprint mechanics until dynamic shoulder control is adequate.
4+ months	Add sport-specific conditioning, reactive drills and controlled contact as objective shoulder criteria are achieved.

Return to Throwing / Overhead Sport

• **Prerequisites:** full pain-free ROM, no apprehension, ≥90% ER/IR strength symmetry, appropriate endurance and scapular control.

• **Initial throwing:** begin a structured interval throwing program at approximately 4 months or later when criteria are met and the surgeon approves.

• **Progression:** short-distance easy toss -> longer flat-ground throws -> increased effort -> position-specific throwing -> mound/serve/smash progression.

• **Advance only** if there is no pain, instability sensation, loss of motion, or next-day increase in symptoms.

• **Unrestricted overhead competition:** generally requires completion of the interval program and full practice tolerance; many athletes require 5-6+ months and throwers may require longer.

References / Evidence Base

1. Gaunt BW, et al. The American Society of Shoulder and Elbow Therapists' consensus rehabilitation guideline for arthroscopic anterior capsulolabral repair of the shoulder. J Orthop Sports Phys Ther. 2010;40:155-168.

2. Willmore E, et al. Rehabilitation guidelines following arthroscopic shoulder stabilisation surgery for traumatic instability - a Delphi consensus. Physiotherapy. 2024;124:154-163.

3. van Gastel ML, et al. Developing a Rehabilitation Guideline (REGUIDE) for Patients Undergoing an Arthroscopic Bankart Repair After Traumatic Anterior Shoulder Dislocation, Focusing on Managing Apprehension. J Orthop Sports Phys Ther. 2024;54:289-301.

4. Age- and time-specific management of traumatic anterior shoulder instability: 2024 ESSKA-ESA Formal Consensus. Part 2: Treatment and return to sports.

5. Stony Brook Medicine. Arthroscopic Anterior Labral (Bankart) Repair Rehabilitation Protocol.

Clinical note: This protocol is intended as a general surgeon/PT framework for uncomplicated arthroscopic Bankart repair. Operative findings, tissue quality, number/location of anchors, bone loss, remplissage, concomitant repairs, revision status, sport demands, and individual patient factors may require modification. Surgical restrictions supersede this guideline.