Beth Israel Lahey Health
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Rehabilitation Protocol:

Arthroscopic Anterior Capsulolabral Repair of the Shoulder - Bankart Repair Rehabilitation Guidelines

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◄ Overview

The shoulder labrum is a fibrocartilaginous rim attached to the margin of the glenoid cavity. It deepens the cavity by approximately 50%. A Bankart lesion is an avulsion of the anteroinferior glenohumeral ligament-labrum complex caused by an anterior dislocation. The vast majority of glenohumeral dislocations are anterior with the humerus in an externally rotated and abducted position. As the humeral head dislocates it may also avulse a piece of bone from the anterior glenoid resulting in a bony Bankart lesion. During dislocation the posterior humeral head may contact the anterior glenoid rim leaving a Hill Sachs deformity on the posterior humeral head.

A Bankart tear creates anterior instability and often results in recurrent dislocations.

During arthroscopic anterior capsulolabral repair the avulsed anteroinferior glenohumeral ligament-labrum complex is reattached to the glenoid rim in order to restore shoulder stability. Capsular plication, or tightening of the anterior capsule, may also be performed. During rehabilitation a balance between protecting the tightened anterior structures and restoration of range of motion must be maintained.

◄ Phase I Protective Phase 0–6 Weeks

Goals

- Educate patient re: avoid stress on repaired tissue
- Protect anatomic repair
- Allow healing of repaired tissue
- Minimize muscular atrophy
- Decrease pain/inflammation
- Promote dynamic stability
- Enhance scapular function, normalize scapular position, mobility, and dynamic stability

Precautions

- Sling at all times, remove only for shower and Elbow, wrist and hand ROM as instructed
- Keep elbow at side at all times when out of sling
- No active or passive range of motion of shoulder for 3 weeks
- Wean from sling at 4 weeks

Weeks 0–3

- **Absolute immobilization** of GH joint for 3 weeks
- Cryotherapy
- Arm in sling at all times except for shower or AROM Elbow, Wrist and Hand
- Elbow at side when arm out of sling

Weeks 3–6

- Continue cryotherapy
- PROM/AAROM:
  - Flexion and Scaption: 90° - 100°
  - Abd: as tolerated
  - Rotation:
    - ER in neutral 0º
    - ER in Scapular plane: 30°,
    - IR in neutral to tol
    - IR in Scapular plane as tol
    - Gentle IR behind back at **5 – 8 weeks**
- D/C sling at 4 weeks unless advised by surgeon

<u>Therapeutic Exercise</u>

<u>Active:</u>

- C-spine, elbow, wrist and hand
- Pendulums
- Scapular retraction
- Scapular clocks (elevation, depression, protraction, retraction)
- Ball squeezes
- Scapular Rhythmic stabilization (RS)
- Sub-maximal isometric exercise at 0° abduction:
  - Flexion, Abduction, IR, ER
- Closed chair table slides

AAROM Overhead pulley/Wand within guidelines

Walking, stationary bike wearing sling

◄ Phase II – Intermediate Phase
Weeks 6 – 12

Goals
- Gradual increase in ROM to WNL
- Decrease pain/inflammation
- Promote dynamic stability
- Progress strength and endurance
- Progress functional activities
- Address C-spine and T-spine joint mobility to facilitate full UE ROM

Precautions
- Progress ROM as tol
- Pain free exercise
- NO pushups
- NO heavy lifting or plyometrics during this stage
- NO abduction in scapular plane with IR (Empty Can) due to likelihood of impingement
- NO excessive load in horizontal abduction or combined abduction and ER (NO pushups, bench press or pectoralis flys)

Manual
- C-spine and T-spine joint mobilizations
- G/H joint mobilizations only to progress ROM as indicated
- Stretch posterior capsule as needed
- Stretch pectoralis minor as needed

PROM →AAROM as needed to achieve indicated goals
- Shoulder flexion as tolerated (initiate in supine)
- Abduction as tolerated (initiate AROM in sidelying)
- Rotation:
  - ER in neutral as tol
  - ER in Scapular plane: 35º to 50º
  - ER at 90º abd: 45º
  - IR in neutral to tol
  - IR in Scapular plane as tol
  - Gentle IR behind back at **5 – 8 weeks**

Therapeutic Exercise
- Progress AAROM →AROM
- Prone rows, extension, "T"s
- Active-assisted progressing to active forward flexion and scaption to 115º with scapulohumeral rhythm
- Strengthen rotator cuff
- Closed chain: ball roll, quadriped but NO pushups
- Biceps and Triceps strengthening with elbow at side

◄ Phase III
12 – 24 weeks

Goals

- Normalize strength, endurance, neuromuscular control and power
- Gradual buildup of stress to anterior capsule
- Gradual return to full ADLs, Work and Recreational Activities

Precautions

- Avoid abrupt jerking stress on shoulder
- Do not progress advanced rehabilitation exercises (plyometrics or stress to end ROM) unless necessary for work or recreation
- Avoid exercises that place excessive stress on anterior capsule: Dips, exercises behind head (always see your elbows)

- Gradually progress to Full ROM
- Joint Mobilizations as necessary

<u>Therapeutic Exercise</u>

- Progress to resisted ER at 90º abd (90º/90º)
- DO NOT overstress anterior capsule with excessive ER at 90º
- Continue shoulder strengthening
- Progress rehabilitation activities to address work/recreational demands
- Light weights/ High reps
- Progress plyometrics if necessary for work/recreational demands

Interval sports programs can begin per MD

AAROM = active-assisted range of motion, ADL = activity of daily living, AROM = active range of motion, PROM = passive range of motion, ER = external rotation, IR = internal rotation, ROM= Range of Motion G/H = glenohumeral

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Rehabilitation Protocol for Arthroscopic Anterior Capsulolabral Repair of the Shoulder - Bankart Repair
Rehabilitation Guidelines: Summary Table

Post –op Phase/Goals	Range of Motion	Therapeutic Exercise	Precautions
Phase I **0 - 6** weeks after surgery Goals: Educate patient re: avoid stress on repaired tissue Protect anatomic repair Allow healing of repaired tissue Minimize muscular atrophy Decrease pain/inflammation Promote dynamic stability Enhance scapular function, normalize scapular position, mobility, and dynamic stability	**Weeks 0-3** **Absolute G/H Immobilization**	Cryotherapy AROM C-spine, wrist and hand **Absolute immobilization** of GH joint Arm in sling at all times except for shower or AROM Elbow, Wrist and Hand Elbow at side when arm out of sling	Sling at all times, remove only for shower and Elbow, wrist and hand ROM as instructed Sleep in sling Keep elbow at side at all times when out of sling No active or passive range of motion of shoulder for 2 weeks Wean from sling at 4 weeks
	Weeks 3-6 PROM/AAROM: Flexion and Scaption: 90° - 100° Abd: as tolerated Rotation: ER in neutral 0º ER in Scap plane: 30°, IR in neutral as tol IR in Scap plane as tol Gentle IR behind back at **5 – 8 weeks** D/C sling at 4 weeks unless advised by surgeon	AROM C-spine, elbow, wrist and hand Pendulums Scapular retraction Scapular clocks (elevation, depression, protraction, retraction) Ball squeezes Scapular Rhythmic stabilization (RS) Sub-maximal isometric exercise at 0° abduction: Flexion, Abduction, IR, ER Closed chair table slides AAROM Overhead pulley/Wand within guidelines Walking, stationary bike wearing sling	

Phase II **6 - 12** weeks after surgery **Goals:** Gradual increase in ROM to WNL Decrease pain/inflammation Promote dynamic stability Progress strength and endurance Progress functional activities Address C-spine and T-spine joint mobility to facilitate full UE ROM	PROM →AAROM as needed to achieve indicated goals Shoulder flexion as tolerated (initiate AROM in supine) Abduction as tolerated (initiate AROM in sidelying) Rotation: ER in neutral as tol ER in Scap plane: 35º to 50º ER at 90º abd : 45º IR in neutral to tol IR in Scapular plane as tol Gentle IR behind back at **5 – 8 weeks**	Manual C-spine and T-spine joint mobilizations G/H joint mobilizations only to progress ROM as indicated Stretch posterior capsule as needed Stretch pectoralis minor as needed Therapeutic Exercise Progress AAROM →AROM Prone rows, extension, "T"s Active-assisted progressing to active forward flexion and scaption to 115º with scapulohumeral rhythm Strengthen rotator cuff Closed chain: ball roll, quadriped but NO pushups Biceps and Triceps strengthening with elbow at side	Progress ROM as tol Pain free exercise NO pushups NO heavy lifting or plyometrics during this stage NO abduction in scapular plane with IR (Empty Can) due to likelihood of impingement NO excessive load in horizontal abduction or combined abduction and ER (NO pushups, bench press or pectoralis flys)

Phase III **12 – 24** weeks after surgery Goals: Normalize strength, endurance, neuromuscular control and power Gradual buildup of stress to anterior capsule Gradual return to full ADLs, Work and Recreational Activities	Gradually progress to Full ROM Joint mobilizations as needed to progress ROM	**Therapeutic Exercise** Progress to resisted ER at 90º abd (90º/90º) DO NOT overstress anterior capsule with excessive ER at 90º Continue shoulder strengthening Progress rehabilitation activities to address work/recreational demands Light weights/ High reps Progress plyometrics if necessary for work/recreational demands **Interval sports programs can begin per MD**	Avoid abrupt jerking stress on shoulder Do not progress advanced rehabilitation exercises (plyometrics or stress to end ROM) unless necessary for work or recreation Avoid exercises that place excessive stress on anterior capsule: Dips, exercises behind head (always see your elbows)

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ROM= Range of Motion G/H = glenohumeral