

## REHABILITATION FOLLOWING OPEN POSTERIOR BANKART REPAIR

The goal of this rehabilitation program is to return the patient/athlete to their activity/sport as safely as possible while maintaining a stable shoulder. This program is based on shoulder anatomy, biomechanics and the healing constraints of the surgical procedure.

The posterior Bankart procedure is one where the orthopedic surgeon repairs the torn posterior capsule by re-attaching it to the glenoid rim. Postoperatively, the patient must be cautious with over aggressive ROM and stretching activities.

### I. PHASE I – PROTECTION PHASE (Week 0-6)

#### Precautions:

- Postoperative brace in 30 degrees abduction, 30 degrees external rotation for 6 weeks (physician will determine length of time and position)
- Brace must be worn at all times with the exception of exercise activity and bathing
- No activities above head or across body
- Must sleep in brace

#### Goals:

- Allow healing of repaired capsule
- Initiate early protected and restricted range of motion
- Retard muscular atrophy
- Decrease pain/inflammation

#### A. Week 0-2

##### Cryotherapy:

- Ice before and after exercises for 20 minutes. Ice up to 20 minutes per hour to control pain and swelling

##### ROM:

- Elbow PROM & AAROM
- Wrist PROM & AROM
- Gripping exercises
- No shoulder motion

##### BRACE:

- Wear brace all day and sleep in brace

#### B. Week 2-4

Exercises:

- Gripping exercises with putty
- Active elbow flexion/extension wrist flexion/extension and pronation/supination
- AROM cervical spine
- Passive ROM progressing to active-assisted ROM
- Active-assisted ROM: (initiate AAROM at 4 weeks)
  - External rotation to tolerance at 90 degrees of abduction
  - Flexion to 90 degrees as tolerated
  - No IR for 6-8 weeks
- Submaximal shoulder isometrics
  - Flexion
  - Abduction
  - Extension
  - External rotation
  - Internal rotation
- Rhythmic stabilization drills ER/IR in scapular plane
- Avoid CKC exercises

\*\*In general all exercises begin with 1 set of 10 repetitions and should increase by 1 set of 10 repetitions daily as tolerated to 5 sets of 10 repetitions.

**B. Week 4-6**Goals:

- Gradual increase in ROM
- Normalize arthrokinematics
- Improve strength
- Decrease pain/inflammation

Range of Motion Exercises:

\*Remove shoulder brace at 6 weeks

- L-Bar active-assisted exercises
- ER at 90 degrees abduction to tolerance
- Shoulder flexion to tolerance to 90 degrees at week 4 then 125 degrees at week 6
- No IR for 6-8 weeks (unless physician specifies)
- Rope and pulley
  - Shoulder scaption to 90 degrees at week 4, 125 degrees at week 6
- All exercises should be performed to tolerance
- Do not push or aggressively stretch into IR, or horizontal adduction

Gentle Joint Mobilization to Re-establish Normal:

- Arthrokinematics
- Scapulothoracic joint motion
- Glenohumeral joint capsular mobility – avoid posterior glides
- May perform inferior and anterior glides at week 5-6
- Sternoclavicular joint motion

Strengthening Exercises:

- Exercise tubing ER/IR at 45 degrees abduction (IR to neutral rotation only)
- Active shoulder flexion (full can)
- Active shoulder abduction
- Isotonic biceps
- Scapular strengthening with arm at 0 or 30 degrees abduction
  - Prone horizontal abduction
  - Prone horizontal abduction with ER
  - Prone rowing
  - Prone extensions
- Rhythmic stabilization ER/IR and Flex/Ext
- Avoid CKC exercises

Proprioception and Kinesthesia Training:

- Initiate joint reposition training

Decrease Pain/Inflammation:

- Ice, NSAID, modalities

Brace:

- \*Discontinue 6 weeks post surgery (per physician direction)

**II. PHASE II – INTERMEDIATE PHASE (Week 6-12)**

Goals:

- Gradually re-establish range of motion
- Normalize arthrokinematics
- Increase strength
- Improve neuromuscular control
- Enhance proprioception and kinesthesia

A. Week 6-9

Range of Motion Exercises:

- L-Bar active-assisted exercises
  - ER at 90 degrees abduction to tolerance (should be 85-90 degrees by week 8)
  - Shoulder flexion to tolerance (165 by week 8)
  - IR at 90 degrees abduction to 30-45 degrees week 10
  - Rope and pulley: elevation in scapular plane

Strengthening Exercises:

- Tubing for IR/ER at 0 degrees abduction
- Initiate isotonic dumbbell program
  - Shoulder abduction
  - Shoulder scaption with ER (Full can)
  - Latissimus dorsi
  - Rhomboids
  - Biceps curl
  - Triceps push downs
  - Scapular muscle training
  - No push-ups or pushing movements
  - Serratus anterior punches
  - Prone row
  - Prone horizontal abduction
  - Prone horizontal abduction ER
  - Sidelying ER dumbbell
- Initiate Neuromuscular Control Exercises for Scapulothoracic Joint
- Progress proprioception training

B. Week 10-12

**Continue all exercises listed above**

Initiate:

- a. Active-assisted internal rotation at 90 degrees abduction
- b. Progress IR to 60-65 degrees at 90 degrees abduction
- c. Initiate push-ups into wall at week 12
- d. Emphasize muscle strength of ER, scapular region

Criteria to Enter Phase III:

1. Full, non-painful ROM
2. No pain/tenderness
3. Strength 70% contralateral side

### III. PHASE III – DYNAMIC STRENGTHENING PHASE (Week 13-20)

#### Goals:

- Maintain/progress to full ROM
- Improve strength/power/endurance
- Improve neuromuscular control
- Enhance dynamic stability
- Improve scapular muscular strength

#### A. Week 13-20

#### Exercises:

- Continue isotonic program
- Continue trunk/LE strengthening and conditioning exercises
- Continue neuromuscular control exercises
- Machine resistance (limited ROM):
  - Latissimus dorsi pull downs
  - Seated row
  - Seated bench press
- May process CKC program:
  - Ball on wall
  - Pushup on unstable surface

#### B. Week 16-20

- Continue all exercises as above
- Emphasis on gradual return to recreational activities

#### Criteria to Progress to Phase IV

1. Full ROM
2. No pain/tenderness
3. Satisfactory clinical exam
4. Satisfactory Isokinetic test

**IV. PHASE IV – RETURN TO ACTIVITY (Week 21-28)**

Goals:

- Progressively increase activities to prepare patient for unrestricted functional return

Exercises:

- Continue isotonic strengthening exercises outlined in Phase III
- Continue ROM exercises
- Initiate Interval Programs between 28-32 weeks (if patient is an athlete)