

TITLE: **Open inferior /anterior capsular shift with or without bankart repair**

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*All information contained in this protocol is to be used as general guidelines only. Specific variations may be appropriate for each patient and may be specified by the physician. In all cases, it is acceptable to advance the program more slowly than stated. If excessive pain is experienced by the patient, discontinue exercise until the physician is contacted.*

\*\* = Adjunctive exercises

**Staged ROM Goals = Approximate ROM targets, Specific limits may be specified by the physician. However, if concomitant procedures are performed (such as capsular release or rotator cuff repair) ROM may be more aggressive.**

	PFE	PER at 20° abd	PER at 90° abd	AFE
POW1	90°	10°-30°	NA	NA
POW 3	115°	20°-40°	NA	NA
POW 6	140°	35°-50°	45°	115°
POW 9	160°	50°-65°	75°	145°
POW 12	WNL	WNL	WNL	WNL

### Phase 1

Goals: Maximally protect the surgical repair (subscapularis, capsular ligaments)  
Minimize pain and inflammatory response  
Achieve staged ROM goals  
Establish stable scapula  
Patient education in post-operative precautions

#### POW 1- POW 3

- Elbow, wrist, and hand AROM with no weight (EWH).
- Scapula elevations and retractions (no weight) done in or out of the sling
- Passive forward elevation in plane of scapula (PFE) to minimal discomfort; 5-15 reps 2 x day. (Patient sitting w/ family member or therapist lifting the arm) *ROM limits may often be specified by the physician.*
- Sitting passive external rotation (PER) in slight abduction and forward elevation; to minimal discomfort, 5-15 reps, 2 x day. (Patient sitting w/ family member or therapist rotating the arm). *ROM limits may often be specified by the physician*
- Pendulum exercise (lean over table a comfortable amount, let the arm hang down being relaxed and keeping the body still. As able, keep body still and move arm in small comfortable circles only). Because of this technique is critical, mainly do in therapy at first.
- Ice for pain reduction
- Patient education
  - Sling use full-time in community, PRN use in the home, or as instructed by the physician.
  - Ok to use arm for ONLY light waist level activities as comfortable ONLY. Make sure pain level is not increasing due to excessive use of arm for ADL's.
  - Continue to sleep in chair.
- \*\*C-spine AROM

- \*\* Supine PROM by therapist w/ in comfort ROM to decrease muscle guarding and gain patient confidence (no mobilizations).
- \*\* Moist heat before exercise
- \*\* Manual scapula strengthening
- \*\* Modalities for pain control PRN

Cautions:

- Make sure PROM is gentle enough to minimize / eliminate muscle guarding / splinting muscles.
- No severe pain w/ PFE, PER exercises; No aggressive PER to protect surgical repair

POW 3-6

- EWH and C-spine ROM PRN no weight
- Scapula elevations and retractions (no weight)
- Continue pendulum
- Continue PFE to staged ROM goals sitting w/ family member progressing to rope and pulley AAFE and supine / sitting AAFE as tolerated once approximately 120° FE is achieved.
- Continue PER sitting w/ family member assist to staged ROM goals
- Initiate posterior capsular stretching / sleeper stretch
- Continue patient education as above
- \*\* Supine PROM by therapist w/ in comfort ROM to achieve staged PROM goals (no mobilizations)
- \*\* Moist Heat / Ice
- \*\* Beginning scapula strengthening
- \*\* Muscle activation exercises (Exercises that activate shoulder girdle muscles to a low level w/out creating significant muscular force)
  - Dusting: patient sits in chair w/ hand grasping a cloth on a table which is at about waist level. Slide hand forward / back in painfree motion while working to maintain scapula stability
  - Sitting active ER/ IR small painfree motion keeping elbow near waist level
  - Beginning closed chain stability exercises (involved hand stays stationary below 90° FE)
- \*\* Modalities PRN
- \*\* Aquatic therapy for gentle painfree AAROM (no swimming strokes)
- \*\* Trunk stabilization / strengthening

Cautions:

- Watch for tendency of excess stiffness with PFE and PER
- Do not initiate scapula strengthening or muscle activation exercises until overall pain level is low and exercises can be completed w/out increasing signs and symptoms

**Phase 2**

Goals Achieve staged ROM goals to normalize PROM  
 Minimize shoulder pain  
 Normalize AROM  
 Begin to increase strength and endurance  
 Increase functional activities

POW 6 – POW 9

- Achieve staged ROM goals in FE
- Achieved staged ROM goals in ER at 20°
- Initiate stretching in 70°-90° of abduction and supine hand behind head stretch
- Initiate functional IR AAROM / stretching as tolerated
- Muscle activation exercises (as described above) PRN
- Initiate base strengthening progression (BSP) (standard rotator cuff, deltoid, and scapula strengthening program. Performed with light resistance and increasing repetitions, 2 x day at most
  - Yellow T-band ER, IR; use 3-4 ft length of band, light to no pretension in a 3-6 inch arc of

- motion
- Yellow T-band anterior deltoid (AD); use 3-4 ft length of band; light to no pretension in a 3-6 inch arc of motion. Start w/ elbow bent and by the side, band tied behind patient, reach forward w/ hand at waist level, over time reach forward to hand at chest level
- Scapula strengthening for scapula retractions, serratus anterior, and scapula upward rotators
- Low level closed chain strengthening
- *No prone forward elevation, abduction, or external rotation*
- Overhead strengthening progression (OSP) (*usually start 0-2 weeks after successful initiation of base strengthening program*)
  - Definition: A stepwise progression in difficulty of strengthening exercises to progress from PFE to full AFE against gravity.
  - All exercises are done in the plane of the scapula (FE)
  - Strengthening cuff, deltoid, and scapula upward rotators for overhead elevation
  - If scapula or glenohumeral substitutions or pain, choose an easier exercise in the progression
  - There is some variability in the exercise sequence
  - *Exercises:*
    - Dusting
    - Side lying gravity eliminated AFE (lie on uninvolved side, involved arm on ironing board slide hand on board)
    - T-band supine FE (start in 90°, pull involved arm into FE)
    - Rope and Pulley AAFE
    - Wall walk AAFE (assure the patient is in FE not flexion)
    - Ball roll on the wall at 90° FE
    - T-bar AAFE w/ assisted or independent eccentric lowering
    - Overhead wall taps
    - Active forward elevation
  - \*\* Static closed chain activities (ex: 4 pt, 3 pt, 2 pt stability drills in quadruped position)
  - \*\* Moist heat / ice
  - \*\* Modalities PRN
  - \*\* PROM by therapist to achieve staged ROM goals w/ mobilizations PRN
  - \*\* Aquatics for AAROM (phase 1), AROM, and light strengthening (phase 2)
  - \*\* Spine therapy assessment / mobilization if non neurogenic cervical or scapula pain or if limitation in end-range shoulder FE
  - \*\* Trunk stabilization / strengthening

Cautions:

- Do not initiate base strengthening program or overhead strengthening progression until overall pain level is low and assure these exercises do not increase signs and symptoms.

POW 9 – POM 3

- Same as above except also ok to add
- Once AFE WNL w/out pain ok to add 1-3 lbs for resistance depending on patient body size
- Advanced strengthening progression (described below) (**if ALL criteria to start program listed below are met**)
  - \*\* Dynamic closed chain activities (ex: UE fitter, slideboard, treadmill hand walk)
  - \*\* Light PNF for cuff / deltoid / scapula (rhythmic stabilization or slow reversal hold)
  - \*\* Open chain kinesthetic awareness drills (ROM replication, etc.)
  - \*\* Golf chipping and putting
  - \*\* Upper body ergometer
  - \*\* Aquatic therapy ok to add light breast stroke

Cautions:

- Strengthening program should progress only without signs of increasing inflammation

- Strengthening program should emphasize high repetitions, low weight, and should be performed a maximum of 2 x day.

### Phase 3

Goals: Normalize strength, endurance, neuromuscular control and power  
 Gradually stepwise build-up in stress to capsular / labral tissue  
 Careful and gradual return to full ADL's, work, and recreational activities

#### POM 3 – 5

- PROM / Stretching PRN / Warm-up stretching
- Continue base strengthening program + AFE w/ 1-3 lbs
- Advanced Strengthening Progression (ASP) PRN
  - *Strict criteria to start program*
    - MMT at least 4+/5 of shoulder girdle
    - Painfree w/ basic ADL's and the base strengthening program
    - Full active forward elevation
    - Goals of returning to sports, heavy labor, or repetitive / heavy overhead work
    - Use to following principles to develop exercises to gradually progress patient from current level of functioning to desired goals
  - *Exercise Principles*
    - Decrease amount of external stabilization provided to shoulder girdle
    - Integrate functional patterns
    - Increase speed of movements
    - Integrate kinesthetic awareness drills into strengthening activities
    - Decrease in rest time to improve endurance
    - Prone strengthening PRN
    - Train larger UE muscles smartly
  - *Sample Exercises*
    - T-band standing PNF patterns
    - T-band 90/90 ER/ IR w/ or w/out arm support
    - T-band batting, golf, or tennis forehand / backhand simulation
    - Weighted shoulder shrugs
- \*\* Return to golf progression (Ok to do w/out advanced strengthening progression)
- \*\* Modalities PRN
- \*\* Therapist stretching / mobilizations PRN
- \*\* Spine therapy assessment / mobilization if non neurogenic cervical or scapula pain or if limitation in end-range shoulder FE
- \*\* Isokinetic strengthening
- \*\* Trunk stabilization / strengthening

#### POM 4-8

- Same as above + ok to add
- Transition to maintenance deltoid / cuff / and scapula strengthening program
- Plyometric program (PRN)
  - May begin after 3-6 weeks of advanced strengthening program
  - Do not begin until 5/5 MMT for rotator cuff and scapula
  - 2-3 x week only
  - Begin with beach ball / tennis ball progressing to weighted balls
  - *Progressions*
    - A) 2-handed tosses – waist level  
– overhead

– diagonal

B) 1-handed drop/ catch drills

C) 1-handed tosses (vary amount of abduction, UE support, amount of protected ER)

- May begin other Interval Sport Programs after 3-6 wks of plyometrics (**once approved by physician**)
- Initiate progressive replication of demanding ADL / work activities
- Initiate modified return to weight-lifting program (**once approved by physician**)

Cautions:

- Pain level high enough for modalities = decrease exercise or ADL intensity

### **DISCLAIMER**

These general rehabilitation guidelines are created by physical and occupational therapist for the rehabilitation of various shoulder and elbow pathologies. These are to simply be used as guidelines. This information is provided for informational and educational purposes, only. Specific treatment of a patient should be based on individual needs and the medical care deemed necessary by the treating physician and therapists. The University of Kentucky and The American Society of Shoulder and Elbow Therapists take no responsibility or assume no liability for improper use of these protocols. We recommend that you consult your treating physician or therapist for specific courses of treatment.

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