TITLE: **Arthroscopic capsular shift with or without arthroscopic labral repair And/ or SLAP 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 and it is important not to gain ROM too fast with this group of patients. 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	135°	35°-50°	45°	115°
POW 9	155°	50°-65°	75°	145°
POW 12	WNL	WNL	WNL	WNL

Phase 1

Goals: Maximally protect the surgical repair
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). *Discontinue if patient experiences feelings of instability.* 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:
- Physician may specify no active biceps ROM with SLAP repair
- Make sure PROM is gentle enough to minimize / eliminate muscle guarding / splinting muscles.
- *Don’t gain PROM too fast*
- Assure that there is no severe pain w/ PFE, PER exercises

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*
- 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:
- 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 at end of phase
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 posterior capsular stretching / sleeper stretch
- Initiate stretching in 70°-90° of abduction and supine hand behind head stretch
- 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
    - Rope and Pulley AAFE
    - 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)
    - 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 quadraped 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.

<u>POW 9 – POM 3</u>

- Same as above except also ok to add
- Initiate functional IR AAROM / stretching as tolerated
- 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:

- *No end range FE or ER at 90 abduction for 10-12 weeks post-operative*
- 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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