General Notes

As tolerated should be understood to include with safety for the surgical procedure; a sudden increase in pain, swelling, or other undesirable factors are indicators that you are doing too much too soon. If any of these occur, decrease activity level and ice.

During rehabilitation if there are any neurovascular findings please call the office.

Ice should be applied to the shoulder for 15-20 minutes following each exercise, therapy, or training session. Return to sport is based on provider team (physician, physician assistant, athletic trainer, and therapist) input and appropriate testing.

All times and exercises are to serve as guidelines. Progression through the protocol should be based upon criteria as opposed to dates listed and will vary depending on each individual patient. Progress should be agreed upon by the patient and his/her team of providers

Post-Operative Phase I: Healing Phase - (Day 1 - Week 2)

Goals:

- Minimize shoulder pain and inflammatory response
- · Protect the integrity of the surgical repair
- Gradually restore pain free passive range of motion (PROM)
- Enhance/ensure adequate scapular function

Sling:

• To be worn at all times except when bathing or performing therapy

PROM:

- Glenohumeral (GH) flexion to 75 degrees
- Abduction in the plane of the scapula to 60 degrees
- Internal rotation (IR) to 45 degrees at 30 degrees of abduction
- External rotation (ER) to 15 degrees at 30-40 degrees of abduction; respect anterior capsule tissue integrity with ER ROM.

Therapeutic Exercises:

- Pendulum exercises
- Scapular stabilization exercises
- Ball squeezes
- No biceps contraction allowed
- No AROM of Shoulder/Elbow flexion, shoulder ER, extension or abduction

Modalities/Education

- Frequent cryotherapy for pain and inflammation
- Pre-modulated electrical stimulation to shoulder for pain reduction
- Patient education regarding posture, joint protection, positioning, hygiene, etc.



Manual

- · Scar and soft tissue mobilization as needed
- Joint mobilizations as needed

Post-Operative Phase II: Motion Phase - (Week 2 - Week 4)

Goals:

- · Minimize shoulder pain and inflammatory response
- Protect the integrity of the surgical repair
- Gradually restore pain free passive range of motion (PROM)
- Enhance/ensure adequate scapular function

Sling:

• To be worn at all times except when bathing or performing therapy

PROM:

- Glenohumeral (GH) flexion to 140 degrees
- Abduction in the plane of the scapula to 85 degrees
- Internal rotation (IR) to 45 degrees and 65 degrees of abduction
- External rotation (ER) to 30 degrees at 30-40 degrees of abduction

Therapeutic Exercises:

- Pendulum exercises
- Scapular stabilization exercises
- Ball squeezes
- Submaximal isometrics for shoulder musculature

Modalities/Education:

- Frequent cryotherapy for pain and inflammation
- · Pre-modulated electrical stimulation to shoulder for pain reduction
- Patient education regarding posture, joint protection, positioning, hygiene, etc.

Manual:

- · Scar and soft tissue mobilization as needed
- Joint mobilizations as needed

Post-Operative Phase III: Advanced Motion Phase - (Week 4 - Week 6)

Goals:

- Minimize shoulder pain and inflammatory response
- · Protect integrity of the surgical repair
- Progress ROM
- Begin light waist level activities



Sling

- Discontinue use of pillow as direct by physician after week 4.
- Begin to wean from sling between weeks 5-6 as directed by MD
- Discontinue sling as directed by physician after week 6

PROM

- Glenohumeral (GH) flexion to Full
- · Abduction in the plane of the scapula to 120 degrees
- Internal rotation (IR) to Full
- External rotation (ER) to 65 degrees at 30-40 degrees of abduction

Therapeutic Exercises:

- Progress to maximal rotator cuff isometrics
- Progress to AAROM/AROM exercises of the shoulder with proper GH rhythm
- · Continue AROM of elbow, wrist and hand
- Progress scapular stabilization exercises
- Initiate rhythmic stabilization exercises
- Stationary bike

Modalities:

• Continue Cryotherapy for pain and inflammation

Manual:

- Scar and soft tissue mobilizations as needed
- Joint mobilizations as needed

Post-Operative Phase IV: Strengthening Phase (Week 6- Week 8)

Goals:

- Achieve normal GH and Scapular rhythm
- Progress A/PROM
- Remain pain free for all exercises

ROM:

- Glenohumeral (GH) flexion to Full
- Abduction in the place of the scapula to Full
- Internal rotation (IR) to Full
- External rotation (ER) progress slowly to 90 degrees at 90-90 degrees of abduction

Therapeutic Exercises:

- Initiate gentle biceps contraction
- Advance scapular stabilization exercises
- Isotonic shoulder strengthening in functional ROM
- Initiate Thrower's Dozen Program
- UBE with low resistance



Proprioception

- PNF strengthening
- Progress rhythmic stabilizations

Manual

- Scar and soft tissue mobilization as needed
- Joint mobilizations as needed

Cardio:

• Stationary bike, Elliptical with light upper body

Post-Operative Phase V: Activity Phase- (Week 8- Week 12)

Goals:

- Progress strength, endurance, neuromuscular control
- Begin shoulder height functional activities
- Gradual and planned buildup of stress to anterior joint capsule

Therapeutic Exercises:

- Rotator Cuff Strengthening- ER/IR strengthening
 - Side lying ER with towel roll
 - Manual resistance ER in supine in scapular plane
 - ER/IR with exercise tubing at 0 degrees of abduction (towel roll)
- Prone rowing at 30/45/90 degrees of abduction to neutral arm position
- Progress rhythmic stabilization drills
 - ER/IR in the scapular place
 - Flexion/extension and adduction/abduction at various angles of elevation
- Progress AROM to isotonics: flexion, scaption, abduction
- Continue A/PROM as needed
- Progress strengthening to focus on both upper and lower segments
 - PNF patterns
 - IR resistance band at 45, 90 degrees of abduction
- Increase resistance for UBE
- Progress isotonic strengthening if patient demonstrates no compensatory strategies, is not painful, and has no residual soreness.

Precautions:

- Do not overstress the posterior capsule with aggressive overhead activities/strengthening
- Avoid contact sports/activities
- Patient education regarding a gradual increase of shoulder activities

Manual:

• As needed



Post-Operative Phase VI: Return to Sport Phase (Week 16+)

Goals:

- Maintain full non-painful P/AROM
- Progress to full strenuous work, throwing and overhead activities

Precautions:

- Avoid excessive posterior capsule stress
- Do not begin plyometircs, throwing or overhead athletic movements until 4 moths postop of when cleared by MD

Therapeutic Exercise:

- Continue to advance scapular and upper extremity strengthening as tolerated in all planes
 - o Include: diagonal/functional patterns, 90/90 strengthening and CKC exercises

Cardio

• Stationary bike, jogging/running/printing on treadmill, elliptical, rowing, kickboard in swimming pool, stair climber

Milestones for return to sport activities and clearance:

- Completion and passing of shoulder functional test at MD/ PT clinic
- No complaints of pain or instability
- Adequate ROM for task completion bilaterally
- Full strength and endurance of rotator cuff and scapular musculature for task completion bilaterally
- Regular completion of home exercise program

