

## Small to Medium (1 – 3 cm) Open Cuff Repair Post-Operative Rehabilitation Program

## SUBSCAPULARIS INVOLVEMENT PRECAUTIONS:

- 1. Limit Passive ER to 45° until 4 weeks post-op
- 2. Full PROM by 8-10 weeks post-op
- 3. NO active/resisted IR until 6 weeks post-op
- 4. Begin active ER early:  $0 30^{\circ}$  (at 30° of ABD) (the purpose is to promote relaxation of antagonistic internal rotators).

## **BICEPS TENODESIS PRECAUTIONS:**

Only
follow if
checked

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- 1. No Resisted elbow flexion for 8 weeks
- 2. No Resisted shoulder flexion for 8 weeks

## **\*\*IF CHECKED, PRECAUTIONS IN BOX ABOVE SUPERCEDE PROTOCOL.**

\*The following protocols are general treatment guidelines. Treatment plan will be established in consultation with referring physician.

\*It is important to know the exact surgical procedure, including the following:

- Size of the tear
- How many tendons involved
- Type of repair
- Tissue quality
- Other procedures performed (acromioplasty, bursectomy, manipulation, etc.)

MAJOR OBJECTIVES for this rehabilitation are:

- 1. 145° passive flexion, 50° passive ER with the humerus in slight abduction in the scapular plane, and IR of the thumb to the upper lumber area by **4 weeks post-op.**
- 2. Full PROM by **8weeks post-op** (\*\*\*Pre-op ROM will affect ROM achieved post-operatively\*\*\*).
- 3. AROM at trunk level allowed at **2 weeks post-op** (except with subscapularis tears). ABSOLUTLEY NO ACTIVE FE or ABD of the extremity above shoulder level until **8** weeks post-op.
- 4. No PRE's until 6 weeks post-op.
- 5. Always stabilize the scapula when performing strength exercise.
- 6. Due to anterior deltoid splitting, protect deltoid for 3-4 weeks.
- 7. Issue home ranger pulleys to progress flexion in plane of scapula



## Phase One – Protective Phase (0-4 weeks post-op)

Goals: Decrease pain and inflammation Protection of the repair Prevent/Decrease glenohumeral stiffness

### Treatment (phase I protective phase 0 – 4 weeks):

- 1. Sling / abduction pillow to be worn at all times (**4-6 weeks**) per physician instruction only
- 2. No showers until instructed to do so by physician
- 3. Cryotherapy
- 4. AROM of cervical spine, elbow, wrist, and hand
- 5. Grip and wrist strengthening
- 6. Pendulum exercises with out sling (start day 1)
- 7. PROM in supine:
  - Elevation in the scapular plane
  - o ER with slight abduction in scapular plane
  - IR with slight abduction in scapular plane (week 2 3)
- 8. Pulley exercises for elevation in the scapular plane (week 2)
- 9. AAROM exercises (use of cane for ER with towel under elbow)
- 10. AROM scapular exercises: retractions, shrugs

# \*11. Submaximal pain-free isometrics for ER/IR only. This should be performed with a towel roll between the trunk and the arm (week 2)

- 12. **AVOID** active ER for the first 2 3 weeks
- 13. AVOID passive horizontal adduction and extension until 4 weeks post-op

## Phase Two – Intermediate Phase (4-8 weeks post-op)

Goals:

- Protect the repair
- Full PROM by 8 weeks
  - Improve strength of the rotator cuff and periscapular muscles Promote proper shoulder biomechanics

### **Treatment:**

- 1. Continue with above program
- 2. Work on ROM with emphasis of full PROM by 8 weeks
- 3. PROM into ER/IR with 45° of abduction with humerus in the scapular plane
- 4. Isometric flexion **6 weeks**
- 5. Begin UBE as tolerated at low resistance at 6 weeks

## \* 6. Initiate PREs with the raband or weights $\rightarrow$ start with ER/IR and extension at 6 weeks

- 7. PREs for scapular stabilizers/posterior shoulder girdle
  - Active motions week 6



- o PREs week 7
  - Prone extension, prone rowing with emphasis on scapular adduction, prone horizontal abduction with arm in ER

8.Perform AAROM supine flexion, ER, and IR (with use of a cane)

# \*9. Rhythmic stabilization of GH joint for ER/IR with arm supported in scap plane (week 6)

10. Glenohumeral and scapulothoracic mobilizations as needed

11. AROM for IR/ER, ext, ADD  $\rightarrow$  watch for substitutions (6-8weeks), FE and ABD (week 8)

## **Phase Three – Strengthening Phase (8-12 weeks)**

#### **Goals:**

Protect the repair Restore full PROM by 8 weeks Restore full AROM by 12 weeks Normal shoulder biomechanics Initiate return to functional activities

## **Treatment:**

- 1. Continue with above program
- 2. Continue PROM/Static stretching for limited motions
- 3. AROM in all directions  $\rightarrow$  watch for substitutions
- 4. Progress theraband/PRE program for all exercises as tolerated:
  - Supine or Prone ER with the arm abducted to 90° and the elbow flexed to 90°. Begin with the arm supported on the table, progress to as unsupported position.
- 5. Manually resisted PNF patterns (progress from isometric to manual resistance to theraband)
- 6. Continue soft tissue mobilizations and increase aggressiveness of joint mobilizations as needed
- 7. "Full Can" Exercises
- 8. Sidelying ER/IR with dumbbell
- 9. Wall push-ups
- 10. Initiate proprioceptive exercises
- 11. Dynamic stability exercises as indicated (bodyblade). Begin in the scapular plane and progress to more provocative positions as tolerated.



## Phase Four – Advanced Strengthening (13-21 weeks)

Maintain full, non-painful AROM/PROM Improve strength of RTC and periscapular muscles Return to functional activities per guidelines set based on tear size and demands of work or sport. Avoid pain-producing activities.

### **Treatment:**

Goals:

- 1. Continue with the above program
- 2. Progress proprioception exercises as tolerated
  - Plyometric throwing exercises as needed
- 3. Aggressive strengthening (Isotonics)
  - o Shoulder flexion, Abduction, ER, IR
  - o Supraspinatus (empty cans)
  - Scapular muscles
  - PNF patterns
- 4. Active Stretching

## Phase Five – Return to Activity (21 weeks and beyond)

Goals:Gradual return to recreational and sport activities<br/>Continue scheduled follow-ups with the surgeon and PT as needed<br/>Return to full activity at 4 months

### **Treatment:**

- 1. Continue with above exercises
- 2. Progress all strengthening and proprioceptive exercises
- 3. Make exercises sport specific
- 4. Determine plan for carrying through with independent home or gym exercise program

### \* Developed and approved by Rolando Izquierdo, M.D. (Updated March 2016)