

## Graft Jacket Rotator Cuff Reconstruction Protocol

### Preoperative

#### Goals

1. Full Range of motion
2. Normal Scapular/GH/Clavicular glides
3. 0 to minimal edema
4. Improve Peri-Scapular muscle strength
5. Independent in HEP

#### Treatment:

1. Modalities to reduce inflammation/pain(Vasopneumatic)
2. Grade 2, 3 mobilization GH, Scapula, Clavicle
3. ROM exercises Passive/Active Assist/Active (pendulums, cane exercises, pulley, wall slides)
4. Peri-Scapular muscle PRE's(scapular retraction, gentle Theraband for retraction, extension, adduction, abduction)
5. Education in HEP/edema control

### Post-operative Day of Surgery

#### Goal:

1. Control edema
2. Initiate elbow, wrist and hand and shoulder shrug exercises for early ROM
3. Use immobilizer all the time except for performing exercises, squeeze exercise ball as much as possible

### PHASE I (Week 0-2)

- Shoulder
- Phase 1 home exercises
    - wrist, elbow and hand exercises
    - squeeze exercise ball as much as possible
    - lets them come out of brace during day when sitting comfortably

### PHASE Ia (Week 2-4)

- Shoulder
- PROM supine scapular plane
  - Codman pendulum exercises
  - Scapular mobilization
  - Flex: to tolerance 0 – 90 degrees
  - Abduction: 0 – 90 degrees
  - ER: 0 -30 degrees at modified neutral (do not stretch ER/IR)
  - consider initiating pool where available
  - **Extension and Horizontal Adduction: Avoid**
- Scapula
- AROM scapular shrugs, scapular retraction, scapular depression
- Elbow/Hand
- AROM Flex/ext in neutral and hand strengthening

### PHASE Ib(Week 4-6)

- Shoulder
- PROM (supine)
  - Flex: to tolerance 0 – 120 degrees
  - Abduction: maintain at 90 degrees until ER increases to 45 degrees then progress abduction to 120 degrees
  - ER: 0 – 45 degrees at modified neutral. Slowly increase abduction position during ER/IR to 80 – 90 degrees by 4 weeks. No aggressive stretching.
  - **Be VERY cautious with IR to avoid tension on the Infraspinatus if repaired.**
  - **Ext and Horizontal Adduction: Avoid**
  - Grade 1,2 GH mobilization in anterior, posterior, inferior directions for pain and spasms
- Scapula
- AROM scapular shrugs, scapular retraction, scapular depression.
- Elbow/hand
- Sub-max isometrics elbow flex/ext in neutral shoulder position

### **PHASE Ic(Week 6-8)**

- PROM (supine)
- Flex: to tolerance 0 – 180 degrees or equal to uninvolved side
- Abduction: 150 – 180 degrees w/ deviation toward scapular plane
- ER: 70 – 90 degrees; IR: 40 – 60 degrees
- Ext: 30 degrees without stretching, **Horizontal Adduction: Avoid**
- Supine stabilization exercises for the scapular muscles
- Scapula - AROM scapular shrugs, scapular retraction, scapular depression
- Elbow/Hand - Sub-maximal Isometric elbow flex/ext in neutral shoulder position  
progress to gentle Isotonics:
- 2-5 lb. BC curls and yellow Theraband Tricep pull-downs

### **PHASE II(Week 8-12)**

- Full ROM is allowed for PROM, AAROM, and AROM. Focus on proper technique and progress as tolerated.
- No resistance exercises for the Rotator Cuff until week 14
- Progress stabilization exercises to standing for the scapular muscles
- Scapula - Peri-Scapular PRE's(Rhomboids, Middle/Lower Trapezius, Lats, Serratus Anterior etc.)
- Elbow/Hand - Progress to 6 lb curls and increase resistance w/ triceps pull-downs

### **PHASE III(Week 12 – 16)**

- Initiate light Rotator Cuff PRE's (14 weeks)at 0 degrees abduction w/ Theraband and progress to moderate resistance
- Progression of standing stabilization exercises
- Progress Bicep/Tricep/Peri-Scapular strength/conditioning
- Add PNF movements

### **PHASE IIII(Week 16-20)**

- Moderate Rotator Cuff PRE's at 30 degrees abduction w/ Theraband and progress to high resistance at 60 degrees abduction
- Progression of standing stabilization exercises
- Progress Bicep/Tricep/Peri-Scapular strength/conditioning
- Begin UBE
- Begin closed chain stability exercises

### **PHASE V(Week 20-24)**

- High resistance Rotator Cuff PRE's at 90 degrees abduction w/ Theraband
- Begin plyometric exercises
- Progression of standing stabilization exercises
- Progress Bicep/Tricep/Peri-Scapular strength/conditioning
- Progress UBE/closed chain stability exercises
- Add gym exercises
- Initiate sport specific training/job related tasks