

# Rotator Cuff Dermal Allograft Reconstruction Protocol

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## 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

*Ultrasling:* will be used for approximately 6 weeks per the surgeon's instruction. Okay to remove for treatment

## PHASE I (Week 0-2)

*Shoulder* - Phase 1 home exercises

- wrist, elbow and hand exercises
- squeeze exercise ball as much as possible
- Begin addressing restrictions of the upper quarter
  - Cervical spine stretching: Upper Trapezius, Levator Scapulae, Scalenes
  - Thoracic Spine and costovertebral joint mobilizations
  - Scapular glides
  - Posture training
- Modalities for control of pain and inflammation
- Grad I-II joint mobilizations

Maintain cardiovascular health using walking, exercise bike

## PHASE Ia (Week 2-4) (Passive only)

*Shoulder*

- Modalities for control of pain and inflammation
- Grad I-II joint mobilizations
- **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

Maintain cardiovascular health using walking, exercise bike

Continue work on the upper quadrant to reduce restrictions to proper physiologic movement

### **PHASE Ib (Week 4-6) (Passive only)**

- Shoulder*
- Modalities for control of pain and inflammation
  - Grad I-II joint mobilizations PA/Inferior for pain/spasms
  - **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**

*Scapula* - AROM scapular shrugs, scapular retraction, scapular depression

*Elbow/hand*  
- Sub-max isometrics elbow flex/ext in neutral shoulder position

Maintain cardiovascular health: walking, exercise bike. Initiate LE and trunk exercises (no bouncing)

Continue work on the upper quadrant to reduce restrictions to proper physiologic movement

### **PHASE Ic (Week 6-8) (Passive only – active assist)**

- Shoulder*
- Modalities for control of pain and inflammation
  - Grad II-III joint mobilizations
  - **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
    - Supine stabilization exercises for the scapular muscles
  - **Horizontal Adduction: Avoid**
    - Initiate AAROM exercises in scapular plane and IR and ER (**No Resistance**)  
\*Focus is on quality uncompensated movement

*Scapula* - AROM scapular shrugs, scapular retraction, scapular depression

*Elbow/Hand* - Sub-maximal Isometric elbow flex/ext in neutral shoulder position  
- Progress to gentle isotonic:  
- 2-5 lb. BC curls and yellow Theraband Tricep pull-downs

Maintain cardiovascular health: walking, exercise bike. Progress LE and trunk exercises (no bouncing)

Continue work on the upper quadrant to reduce restrictions to proper physiologic movement

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

*Shoulder* - Modalities for control of pain and inflammation  
- Grad II-III joint mobilizations  
- Full ROM is allowed for PROM, AAROM, and AROM.  
\*Focus on proper technique and progress as tolerated.  
- **No resistance** for 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

Maintain cardiovascular health: walking, exercise bike, Progress LE and trunk exercises (no bouncing)

### **PHASE III (Week 12 – 16)**

- Modalities for control of pain and inflammation
- Grad II-III joint mobilizations
- Initiate light Rotator Cuff PRE's (**at 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

Maintain cardiovascular health using walking, exercise bike, consider light jogging LE and trunk exercises to be progressed

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

- Modalities for control of pain and inflammation
- Grad II-III joint mobilizations
- 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

Maintain cardiovascular health using walking, exercise bike, jogging, bleachers LE and trunk exercises to be progressed

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

- Modalities for control of pain and inflammation
- Grad II-III joint mobilizations
- 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/interval throwing program