

## **REVERSE TOTAL SHOULDER ARTHROPLASTY – REHAB PROTOCOL**

### Abduction Pillow:

- Use and recommendation will be case specific

### Sling Wear:

- Week 1-2 with abduction pillow and sling, 24 hours/day except for PT and bathing
- Week 2-4, sling only or patient preference at 24 hours/day except for PT and bathing
- Gradual wean from sling starting week 4.
- 2lbs weight limit below shoulder height starting week 4
- During PT and during exercise, sling purposefully removed
- May be extended in case of a complication or in revision RTSA case

### Movement Precaution (12 weeks)

- No extension beyond neutral
- No Adduction + IR combined motions
- No Extension + IR combined motions

### Mobilizations:

- With RTSA, no mobilizations through GH junction directly at any time throughout rehabilitation
- Anatomical center of rotation shifts and convex/concave rule for arthrokinematics are not applicable, so standard mobilizations are not appropriate

### Exceptions:

- Poor Bone Stock: Will delay start of protocol second to surgeon's assessment of repair integrity

### **Protective Phase**

### **Post-op Weeks 4 to 8**

Goals: Facilitate healing of soft tissues local to joint, protect deltoid and restore/maintain PROM

- Range of Motion:
  - PROM guidelines – scapular plane elevation not to exceed 120, ER at 30\* abduction to 30-45\*, IR at 30\* abduction to 30-45\*, grade I-II scapular mobilization, all planes
  - May initiate light AAROM activities, including pulleys/wand
- Therapeutic Exercise:
  - Submaximal RC and periscapular stabilizer isometrics
- Modalities:
  - Interferential electrical stimulation and cryotherapy for pain modulation
  - FES for muscle re-education
  - Ultrasound/phonophoresis for control of inflammation

### **Weeks 5 to 6**

- May progress AAROM activities, including wand/pulleys, initiate UBE AAROM

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## Strengthening Phase

## Post-op Weeks 8 to 14

Goals: Focus on progressive strengthening to restore force couple mechanics, enhance dynamic stabilization/neuromuscular control and increase strength, power, and endurance to promote optimal tolerance to functional activity

- Range of Motion:
  - Continue PROM scapular plane elevation to 130\*+, ER/IR to tolerance at 30\* abduction, grade I-II scapular mobilization, all planes
- Therapeutic Exercise
  - Isotonic periscapular progression, light isotonic RC progression with high volume and low intensity, remember that minimal isolated IR/ER will exist in neutral position
    - Considerations: avoid hyperextension
- Modalities: continue PRN

## Functional Phase

## Post-op Weeks 14+

Goals: Focus on progressive strengthening to restore force couple mechanics, enhance dynamic stabilization/neuromuscular control and increase strength, power and endurance to promote optimal tolerance to functional activity.

- Range of Motion:
  - Continue PROM scapular plane elevation to tolerance, ER/IR to tolerance at 30\* abduction, grade III scapular mobilization all planes
- Therapeutic Exercise:
  - Progression of AA exercises (UBE, proprioception and CKC mobility exercises, e.g. bodyblade, physioball)
  - Progression of periscapular activation with Theraband
  - Progression of gentle GH IR and ER isotonic strengthening
  - Progression of deltoid strengthening exercises
  - Progression wrist/hand/elbow exercises with resistance
    - Maintain high volume and gradually increase intensity levels
- Modalities: continue PRN

## Discharge Criteria

- Patient to complete HEP 3-4x a week
- Painless AROM to be grossly WNL's compared contralaterally
- MMT grade grossly 4/5 with flexion, abduction strength minimally, ideally 4+ to 5/5

## Return to Activity

- Sedentary job – 4 to 6 weeks
- Stationary bike for exercise – 4 weeks
- Treadmill/walking aggressive for exercise – 9 weeks
- Swimming – breaststroke 9 weeks, depending on progress
- Tennis/golf at 12 weeks, depending on progress
- Running at 12 weeks

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