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**POSTOPERATIVE REHABILITATION PROTOCOL:  
TOTAL SHOULDER / HUMERAL HEAD ARTHROPLASTY**

- Humeral head arthroplasty**
- Humeral head arthroplasty with soft tissue interposition**
- Total shoulder arthroplasty**
  
- Any of above in combination with ROTATOR CUFF REPAIR**

**Phase 1: Week 0-3**

- Sling at rest
- Cryocuff prn, may wean as tolerated
- Pendulums (Codman's)
- Pulleys: Flexion with neutral rotation (palm down)
- Easy isometric exercises: abduction, ER, extension, flexion
  - No isometrics if combined with rotator cuff repair
- PROM as per MD (performed supine position to enhance relaxation, 130° forward elevation, 30° external rotation with arm at side, and 60° abduction in scapular plane unless instructed otherwise)
- Subscapularis precautions: No active internal rotation at any position
- Avoid position of arm extension
- Elbow, wrist, hand exercises
- Edema control prn
- Eating, writing, limited computer use when tolerated, unless instructed otherwise
- Scapular stabilization exercises

**\* No deep tissue massage \***

**Phase 2: Week 4-6**

- Sling at rest
- Continue above
- Progress to external rotation isometrics
- Progress to active assisted ROM in the supine position, with exception of internal rotation
  - **No active ROM if combined with rotator cuff repair**
  - **Supine PROM only if combined with rotator cuff repair**
- Gradual progress of exercises in supine to vertical position

- Gradual progression of forward elevation to full passively within pt tolerance
- Continue limitation of external rotation
- Scapular stabilization exercises

### **Phase 3: Week 7-10**

- Wean from sling
- Progress to full AROM/AAROM/PROM in all planes
- Include wand exercises
- Emphasize posterior capsular stretching
- Begin active internal rotation
- Begin PRE's within pt tolerance, except subscapularis
- Isotonic exercises beginning without weight, progressing within pt tolerance to PRE's, starting 2-4 oz. and increasing incrementally as tolerated
  - **If combined with rotator cuff repair, PRE's should be delayed until 10 weeks post surgery**
- Topical massage prn

**\* No strengthening of subscapularis until 12 wks post surgery \***

### **Phase 4: Week 11-16**

Continue full strengthening and stretching program

### **Phase 5: Week 20-28**

Return to full functional activities, including light recreational sports depending upon pt strength and medical condition

Avoidance of high impact activities such as hammering, contact sports, free weight training is recommended.

This protocol provides you with general guidelines for the rehabilitation of the patient undergoing total shoulder or humeral head replacement.

Specific changes in the program will be made by the physician as appropriate for the individual patient.

Questions regarding the progress of any specific patient are encouraged, and should be directed to Dr. Lervick at **952-944-2519**.

### **REFERENCE:**

Clinical Orthopaedic Rehabilitation, 2<sup>nd</sup> edition. SB Brotzman, KE Wilk. Mosby 2003.