# REHABILITATION GUIDELINES
# TOTAL SHOULDER ARTHROPLASTY

**INDICATIONS**

Total shoulder arthroplasty, or joint replacement, is indicated when pain, instability, or limitations in ROM interfere with a patient's ability to perform functional tasks. Underlying diagnoses include rheumatoid arthritis, osteoarthritis, trauma, or tumor.

**SURGICAL PROCEDURE**

An incision is made at the delto-pectoral groove. The subscapularis tendon is exposed and divided transversely just medial to the lesser tuberosity. The remaining rotator cuff insertions on the greater tuberosity are preserved. The anterior capsule is divided lateral to the glenoid. The humeral head is dislocated anteriorly and the articular surface is respected. The glenoid labrum is then excised and a slot is made in the fossa to accept the glenoid component of the prothesis. Cement is placed in the slot and the component is fitted into its final position. A hand held reamer is used to shape the humeral shaft for fitting of the humeral head component of the prothesis. The component is then driven down the shaft of the humerus until it is in its correct position. The anterior capsule and supscapular

## IMMEDIATE POST-OP DOS:

Wean from sling as quickly as possible.

Pendulum exercises are initiated every 2-3 hours for 5 min. sessions. Frequent daily scapular elevation, depression, retraction, and protraction are encouraged.

Pulleys may be initiated on day 1, if IR is maintained. Also, if patient tolerates, forward flexion with wand for AAROM is permitted.

Because the subscapularis is divided and repaired, the patient is cautioned against active internal rotation, and passive ER beyond 35-40° (may vary with patient). A/PROM in all other planes is permitted; be certain the arm is held in internal rotation for forward flexion and abduction.

Patient should be cautioned against resistive internal rotation. A/PROM for elbow/wrist/hand is permitted. Active use of the arm/hand for ADLs is encouraged, as long as there is no resisted internal rotation (eg., pulling a door shut, pulling on a snug coat, etc.)

Pain management may consist of TENS, icing, and/or pain pump.

## 3-6 WEEKS POST-OP DATE:

Increasing emphasis should be placed on active internal (begin at 5 weeks) and external rotation. Active external rotation beyond 35-40° may begin at 6 weeks. Do not permit combined ER with abduction, either active or passive, until after 6 weeks

Initiate ER to neutral with forward flexion and scaption.

## 5-6 WEEKS POST-OP DATE:

At 6 weeks, gentle passive ER may be initiated. Progression to full ER will vary with tissue strength. Gently conservative passive stretches include pulleys, dowel rod, and progressing to theraband ER stretches or ER stretch with weights. These may be combined with heat and/or Ultrasound for tissue stretch. ER should be attempted with the shoulder ADDUCTED.

Full return of A/PROM in all other planes not common by 6 wks post/op, especially with DJD patients; abduction may lag behind other movement until ER improves.

## 6-8 WEEKS POST-OP DATE:

Emphasize passive/active ER gains.

Begin isometrics every other day emphasizing subscapularis and pectoralis major by use of IR and adduction. 3-5 sets of 10-12 reps is best, with wall or other hand as resistance. Isometrics should be performed in various positions (ex.: IR with arm at neutral, 30° IR, 60° IR).

At 8 weeks, initiate Theraband strengthening, also every other day. 3-5 sets of 10-12 again recommended. Include rotator cuff and scapular stabilizer muscles.

## 8-12 WEEKS POST-OP DATE:

Continue strengthening and consider formal work conditioning program or UE strengthening program. A structured program, supervised by an experienced therapist, is necessary to safely regain strength while minimizing the chance of injury to the involved musculature.

By 12 weeks, depending on ROM and pain level, the patient may be able to gradually return to most activities. However, activities requiring substantial ROM (golfing, swimming, etc.) may need to be delayed until 6 months postop.

## CONSIDERATIONS DATE:

Essentially the only motions not allowed in early weeks are active IR and A/PROM in ER beyond 35-40°. Although painful, patients are generally able to function quite well within these limitations and routinely remove the sling/stabilizer for activity.

Verbally remind pt. of ER limitations; sling should be left off if pain permits.

Regaining active ER can be a challenge. A strong HEP of heat, stretch, and weighted exercises is essential for a good result.