

TOTAL SHOULDER REPLACEMENT

POSTOPERATIVE PROTOCOL

1. Beginning the Afternoon of the Day of Surgery:

- a. Remove the shoulder immobilizer on the afternoon of the day of surgery. With the shoulder sling immobilizer removed, the patient may gently move the arm into comfortable positions.
- b. Perform passive flexion of the patient's arm up to 90 or 120 degrees or as far as is comfortable for the patient.
- c. An alternative technique uses CPM, which is instituted when the patient is transferred off the operating room table onto the recovery room bed. This allows continuous passive flexion of the arm up to 90 or 120 degrees or more.

2. On the First Postoperative Day:

- a. Instruct the supine patient on how to perform passive flexion of the arm using the other arm as a power source and/or through the use of a pulley and rope system attached to the overhead bed frame. At the extreme of flexion, hold the arm for a count of five. Each passive exercise should include five repetitions and be performed three to four times per day.
- b. Instruct the supine patient in how to develop passive external rotation stretching exercises with a three-foot stick.
- c. Instruct the erect patient in performing the pendulum exercises three to four times per day.
- d. Encourage the patient to use the hand and arm for gentle everyday activities such as eating, brushing teeth, drinking liquids, etc.

3. On the Second and Third Postoperative Days:

- a. Continue the patient with passive flexion and external rotation exercises. In the erect position, the patient can use an overhead pulley to increase passive flexion and continue to use the arm for gentle living activities.
- b. Usually, dismiss the patient on the third day or when 90 to 120 degrees of passive flexion and external rotation of 10 to 15 degrees are achieved. Instruct the patient to continue exercises three to four times per day, seven days a week.
- c. Encourage the patient to continue using the arm for gentle daily living activities.

4. Remove the running subcutaneous sutures at two weeks.

5. First Follow-up Visit (Four to Six Weeks):

- a. If the patient does not have sufficient passive motion, institute more stretching exercises, such as wall climbing, more overhead stretching with the pulley, the three-foot stick, etc.
- b. Encourage the patient to use the arm for progressive everyday activities.
- c. If the patient has weakness of the anterior deltoid, institute a specific exercise program which will strengthen the anterior deltoid in the supine position.

6. Subsequent Follow-up Visit (Six to Eight Weeks):

- a. Continue the stretching exercise of the shoulder three to four times per day.
- b. When the patient has sufficient passive range of motion, such as 120 to 140 degrees of flexion and 20 to 40 degrees of external rotation, institute strengthening exercises of the deltoid and rotator cuff muscles with Therabands. Gradually increase the resistance by using the different colors and strengths of Therabands. Strengthen the scapular stabilizer muscle, such as the trapezius muscle, by performing shoulder shrug exercises against weight. Strengthen the serratus anterior and rhomboid muscles by using wall push-ups and progressing to knee push-ups as indicated.

7. Carefully instruct the patient that keeping the shoulders loose and strong is a life-long, ongoing rehabilitation program.