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Total Shoulder Arthroplasty Rehabilitation Protocol

GENERAL INFORMATION:

- Expected recovery time is 6-12 months
- The subscapularis must be detached and reattached to perform the procedure. External rotation motion must be protected for 6 weeks after the procedure and active internal rotation against resistance avoided for 12 weeks after the procedure. No active internal rotation allowed until 6 weeks postop.

EXERCISE PROGRAM OVERVIEW: Therapy begins approximately 14 days after surgery. Exercises should be performed daily either at home or with a therapist.

- No Active ROM (AROM) shoulder any plane for 4 weeks
- No Active IR shoulder for 6 weeks
- Sling x6 weeks. Must use when sleeping at night as well.

Phase 1: ***Initial Postop Phase 0-2 Weeks***

Phase 2: ***Passive Range of Motion 2-6 Weeks***

Phase 3: **A*ctive Range of Motion 6-12 Weeks***

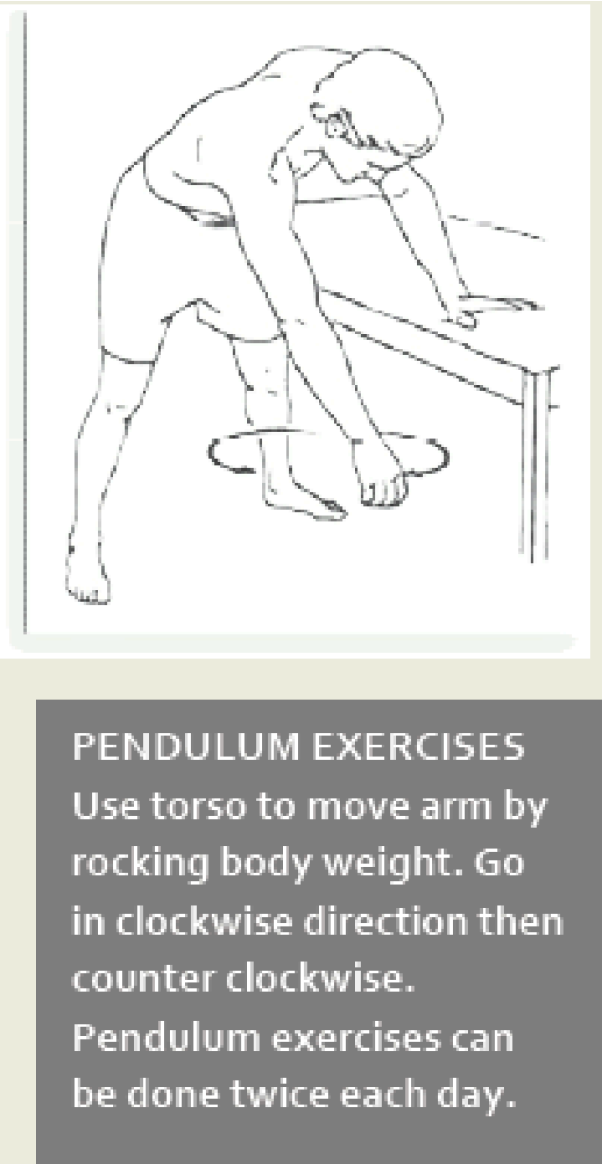
Phase 4: ***Resisted Exercise 12-24 Weeks***

Phase 5: ***Full Recovery of Strength: 24 Weeks+***

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Phase 1: Initial Postop Phase: 0-2 Weeks

- No AROM allowed in any plane for 4 weeks post-op.
- In hospital therapists to teach Pendulum exercises to pt to perform at home from discharge until first follow-up appointment.
- No passive external (PER) of shoulder beyond neutral (or as directed by physician if different).
- Sling on at all times except with exercises and showering.
- Ice at least 3 times per day for 20 minutes to decrease swelling



Phase 2: Passive Range of Motion 2-6 Weeks

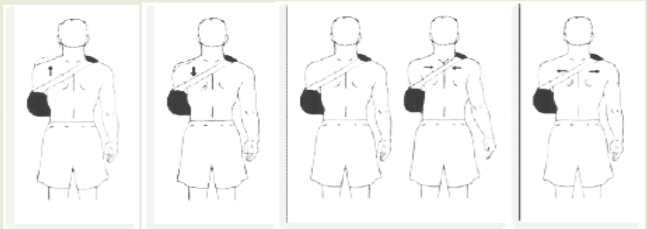
- No AROM any plane until 4 weeks Postop
- No AIR for 6 weeks Postop
- Sling use to continue until 6 weeks Postop

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- Pendulum exercises
- Ok to do scapular exercises in sling
- Passive ER: limit to 20 degrees weeks 2-4, limit to 30 degrees weeks 4-6
- Passive FF: limit to 90 degrees weeks 2-4, increase to 120 degrees weeks 4-6, as tolerated thereafter
- Active FF: Begins 6weeks postop. Increase as tolerated to limits of passive FF.

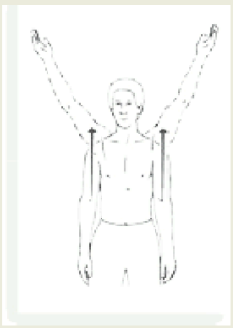
Phase 1: Scapula Exercises
(1-12 Weeks after Surgery)

Phase 1: Scapula Stabilizer Exercises
Scapula exercises begin after 1 week, and are done while the patient's arm is in the sling. Scapula exercises should include elevation with shrugs, depression, retraction and protraction. Six weeks after surgery, these can continue out of the sling until strengthening exercises begin, 12 weeks after surgery. These exercises can be done daily.



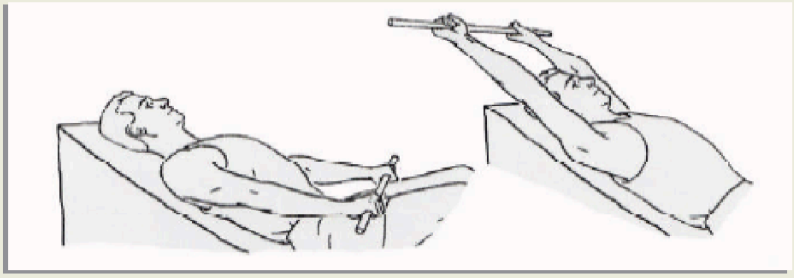
SCAPULA EXERCISES WITH SLING – 1-6 WEEKS AFTER SURGERY
While upright and wearing the sling bring shoulder blades up as you shrug, down as you depress the shoulder, together toward the spine, and apart. Practice upright posture. These can be done daily.







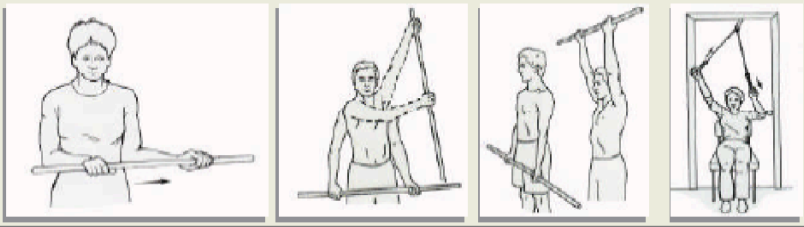
ACTIVE RANGE OF MOTION
While upright, the patient moves the arm in front of the body (forward elevation) and to the side of the body (abduction)



45 DEGREE ACTIVE ASSISTED RANGE OF MOTION
While propped on a pillow at 45 degrees and using a stick or cane, the normal arm will move the affected arm over the head. The arm is moved in forward elevation, abduction, and external rotation. This begins 5 weeks after surgery and is done daily.



ACTIVE RANGE OF MOTION
It is important to avoid "hiking" the shoulder. Place the uninvolved hand on the affected shoulder, or do these exercises in front of a mirror to avoid this.

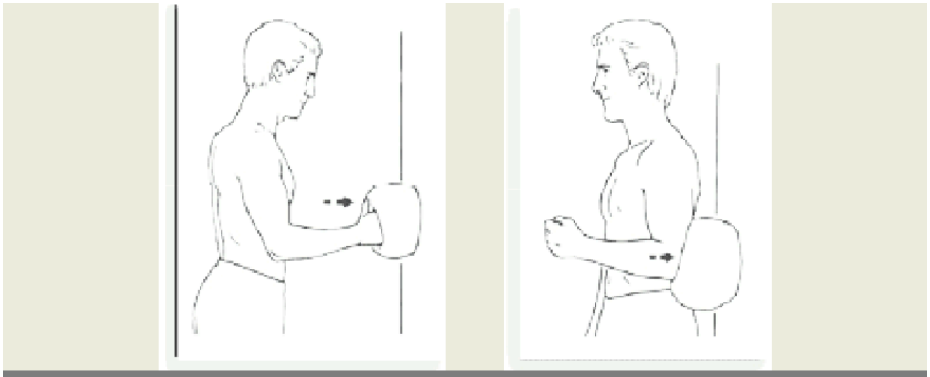


UPRIGHT ACTIVE ASSISTED RANGE OF MOTION

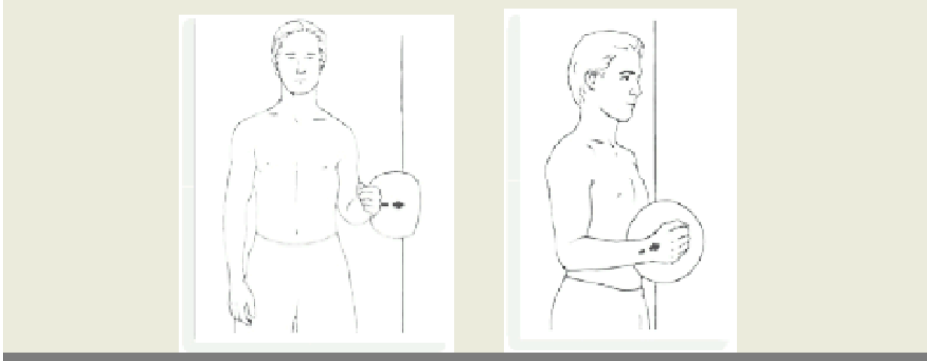
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Phase 4: Resisted Exercise 12-24 Weeks

- Ok to progress with full strengthening activities in FF/ER starting week 12
- Begin IR isometrics week 12, Begin to slowly & progressively institute full strengthening of IR weeks 14-24
- Goal to have full AROM all planes by 16 weeks postop



ISOMETRIC PUSH AND PULL
With a pillow against the wall, and the arm tucked close to the body, create pressure with the fist for forward push, and with the elbow to push backward. Hold the position for 15 seconds then rest for 30 seconds. Repeat this 10-15 times. This can be done daily.



ISOMETRIC EXTERNAL AND INTERNAL ROTATION
With a pillow against a wall, and the arm tucked close to the body, create pressure with the back of the hand for external rotation, and with the palm of the hand for internal rotation. Hold the position for 15 seconds then rest for 30 seconds. Repeat this 10-15 times. This can be done daily.

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ROTATOR CUFF STRENGTHENING
With the arm tucked close to the body, use rubber tubing to provide resistance to internal rotation of the arm. Turn around to use the tubing to provide resistance to external rotation of the arm. Alternatively, you may lie on your side and use small hand weights to provide external rotation resistance. Do 10-15 repetitions, for 3-4 sets, for 3 days/week.

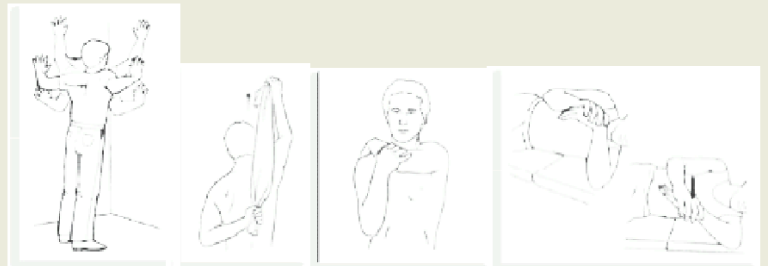


DELTOID STRENGTHENING
With the arm tucked close to the body, use rubber tubing to provide resistance to forward punches. Turn around to use the tubing to provide resistance to pulling the arm. Do 10-15 repetitions, for 3-4 sets, for 3 days/week.

DO NOT DO FULL-CAN OR EMPTY-CAN EXERCISES! These place too much stress on the rotator cuff.



RESISTED SCAPULA STRENGTHENING
Scapula strengthening exercises include locked elbow extension to work the trapezius, press-up plus-reaching toward the ceiling to work the serratus. Rows may be done kneeling with elastic bands, and upright with a hand weight. Like other strengthening exercises, each exercise should be performed as 10-15 repetitions, followed by 2 minutes of rest, and repeated as 3-4 sets. Strengthening exercises should be done 3 days each week.



SHOULDER STRETCHING
Stretching should be done daily. Hold each stretch for 15 seconds, rest for 15 seconds, and repeat 5 times. The corner stretch will stretch the anterior shoulder. The towel stretch, cross-body stretch, and the sleeper stretch will stretch the posterior shoulder. Begin with gentle stretching. After 16 weeks, aggressive stretching may be used if needed.

Phase 5: *Full Recovery of Strength: 24 Weeks+*

- Pt allowed full activities without restriction except as implicated by treating surgeon
- Strength and ROM gains expected to continue for at least 1 year postop