

**Protocol S10**  
**Accelerated Physical Therapy Protocol for Shoulder Replacement**  
**(Hemiarthroplasty or Total Shoulder Arthroplasty)**

**Phase I: Motion Phase (0-6 wks)**

**GOAL:**

- Increase passive and active shoulder range of motion.
- Protect the integrity of the shoulder replacement.
- Decrease pain and inflammation.

**ANCILLARY MEASURES:**

- Use shoulder immobilizer for 3-4 weeks, then discontinue.
- Use pain medications as needed.
- Use moist heat modalities before exercises.

**EXERCISES:**

- **Codman's Pendulum:** Stand adjacent to a chair or table and bend slightly at the waist. Support your body weight by leaning on the chair or table with the opposite arm. Let the full weight of the operated arm hang freely. Gently swing the operated arm forward and back, side to side as tolerated for 15 seconds. Progress to 3-5 minutes. Repeat 3 times each day.
- **Passive Forward Flexion:** Use a therapy helper or your opposite arm to gently raise operated arm up in front. Start with operated arm at your side and passively bring hand to your mouth, forehead and to the top of your head. Repeat 3 times per day, 10 repetitions. Passive shoulder abduction is also permitted.
- **Active and Gentle Passive External Rotation:** With arm at side and elbow flexed 90 degrees, rotate your forearm, bringing hand straight out in front (as though accepting change from a cashier). Gradually increase active external rotation as tolerated. Repeat 3 times per day, 10 repetitions.
- **Active Range of Motion:** Begin progressive active range of motion in all planes in pain free range. Repeat 3 times per day, 10 repetitions.
- **Overhead Pulley:** Secure overhead pulley in doorway. Grasp both handles. At first, pull down on the unoperated side while the operated shoulder is relaxed (passive motion). Progress to active motion of the operated shoulder as tolerated. Repeat 3 times per day, 10 repetitions.
- **Isometrics:** Shoulder flexion, extension, abduction, external rotation and internal rotation isometrics are encouraged. Shoulder shrug exercise as tolerated. Elbow flexion isometrics may be initiated.

**PRECAUTIONS:**

- Physical therapist should understand expectations for shoulder range of motion based on passive shoulder ROM achieved intraoperatively.
- Avoid aggressive external rotation so as not to jeopardize the subscapularis repair.

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**Phase II: Strengthening Phase (7-12 wks)**

**GOAL:**

- Decrease pain and inflammation.
- Regain full active ROM of operated shoulder.
- Re-establish shoulder stability.
- Improve muscle strength.

**ANCILLARY MEASURES:**

- Use pain medications as needed.
- Ice shoulder (cold pack) after exercises and/or as needed.

**EXERCISES:**

- **Continue all Phase I exercises** described above. Add the following exercises which may be supervised by a physical therapist.
- **Wall Climb:** Face a wall with hands out in front, touching the wall. Use fingers to climb the wall, slowly raising the arms. At the peak, hold for 15-30 seconds, 5 repetitions.
- **Posterior Shoulder Capsule Stretch:** Bring operated arm across body to feel the stretch in the posterior shoulder (back side). Hold for 15-30 seconds, 5 repetitions.
- **Supine Overhead Stretching:** Begin in a supine position (lying flat on bed). Grip a stick with both hands. Raise the stick slowly overhead. Hold for 5 seconds, 5 repetitions.
- **Isotonic Strengthening w/Therabands:** Secure the theraband to a doorknob or hook so that you may stretch the band until you feel resistance. Start using low resistive theraband, 5 repetitions, 3 times per day. Gradually increase repetitions to achieve 20 repetitions per exercise, 3 times per day. Then graduate to more resistive theraband and begin with 5 repetitions and repeat process, gradually increasing repetitions per exercise per day. Strengthening exercises should include shoulder flexion, extension, abduction, external rotation and internal rotation.
- **Shoulder Shrugs:** Exercise should be performed with a theraband. Stand in the center of the theraband, shrug shoulders and hold for 5 seconds. Repeat 3 times per day, 10-15 repetitions.
- **Wall Push Ups:** Stand at arms-length away from wall. Place hands on wall at shoulder height. Rotate hands inward 45 degrees. Lean towards wall and pinch shoulder blades together, hold for 5 seconds. Repeat 3 times per day, 10-15 repetitions.

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**Phase III: Maintenance Phase (13+ wks)**

**GOAL:**

- Maintain ROM.
- Increase activities of daily living (ADLs).

**ANCILLARY MEASURES:**

- Use pain medications as needed.
- Ice shoulder (cold pack) as needed.

**EXERCISES:**

- **Continue all Phase I and Phase II exercises.**
- **Isotonic Strengthening w/Free Weights:** Progress to light free weights (not more than three pounds) after therabands have been used.