

PHYSICAL THERAPY PROTOCOL AFTER TOTAL SHOULDER ARTHROPLASTY:



The intent of this protocol is to provide our patients with a guideline for their postoperative rehabilitation program following a *total shoulder arthroplasty*. This guideline offers a supplement to formal physical therapy.

This program may be modified by your treating surgeon and his/her team depending on a variety of factors including the quality of your bone and rotator cuff.

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Phase I – Protection of Repair Immediate Post-Surgical Phase (Week 1-4):

In our practice you will receive a copy of your operative report with specific guidelines that may slightly change this program, so please review this document and compare to the general guidelines below.

Goals:

- In general you will be in a sling with a strap around your waste and a pillow along your side. This will protect the part of the rotator cuff tendon, the subscapularis, which is in the front of your shoulder. This tendon is usually cut and repaired after the placement of the reverse shoulder replacement so it must be protected initially.
- While you can bend your elbow and bring your hand to your mouth, you should not actively lift your arm during this period. You can keep your elbow at the side and type on a computer.
- You can remove the sling and allow your arm to swing like pendulum. You can move your elbow, wrist and fingers.
- The formal therapy program may be prescribed by your surgeon to begin after the first week following surgery. Alternatively, an online physical therapy program may be prescribed as documented below in this document.

You should sleep with the sling on. You can place pillows on the same side of your surgery to avoid rolling onto your operated shoulder. Some patients feel better sleeping propped up or in a reclining chair initially following surgery.

Cold Therapy using either a compression device or ice in a plastic bag is very effective to relieve pain. Day 1-2: as much as possible -Day 3-6: post activity, or for pain, or for comfort
(IMPORTANT: USE TOWEL TO PROTECT SKIN AND PAUSE CRYOTHERAPY AT LEAST FOR 20 MIN/HOUR TO PREVENT FROSTBITE)

Precautions:

- No active range of motion (AROM) of your shoulder. This means no muscles around the joint should be helping to move or lift your arm.
- Maintain arm in sling, remove only for exercise for elbow, wrist and fingers
- No lifting of objects
- No excessive stretching or sudden movements

- No supporting of body weight by hands. Do not use your operated arm to push yourself out of bed or a chair.
- Keep incision clean and dry
 - You may go in the shower after several days but make sure the water sprays below the dressing on your shoulder
 - After one week, when the dressing is removed you may go in the shower and get your shoulder wet. Use this opportunity to do pendulum exercises as the warm water will allow you to move your shoulder with less discomfort
 - It may also be easier to manage dressing if you wear an oversized shirt which buttons in the front or a garment which is loose so it can easily be pulled over your head. In all cases it is easier to put your operated arm through the sleeve of your shirt without raising it or moving it to the side. Then put the other arm in the shirt.

Exercises and online videos (click on each exercise to see video):

[shoulder shrug and roll](#)

- Pendulum Exercises: (start of pendulum exercises is defined by the surgeon in the OR report and usually begins right after surgery. Do not start pendulum exercises if the operation report states that pendulum exercises should be started until the 4th to 8th week after surgery.)

[pendulum exercises](#)

- Start passive Range of motion (PROM): The PROM exercises should be supervised by the physiotherapist during the first session. In addition, the PROM home exercises are usually supervised and instructed by a trained by the physiotherapist before you begin these. Start of passive ROM is defined by the surgeon in the operative report. Do not start PROM exercises initially if the operation report states that PROM exercises should be delayed until a later).

Phase II – Active Range of Motion and Protection Phase (Week 5-8):

Goals:

- Gradually start to use your involved arm for daily activities including washing, dressing. This will help you improve your active range of motion. Start driving when you feel confident in use of your arm.
- Discontinue brace / sling at end of week 4 (Your surgeon may modify this timeline)
- Begin active range of motion in physical therapy. Your physical therapist will instruct you in the exercises that are best for you. The online videos below can guide you and your therapist.

Precautions:

- Avoid lifting more weight than a small cup of coffee • Avoid sudden jerking motions
- Please avoid supporting of body weight by hands and arms as when rising from a seated position
- Stretch and reach behind your back only within the range of comfort. Your therapist and videos below will guide you in this process.

Exercises and online videos– Phase II Stage: (Please click on links to see the video demonstration of each exercise)

In general, please do these exercises 2-3 times each day on your own if you are not directly working with a physical therapist. This should be in the morning, afternoon, and evening.

1. [flexion in supine position](#)
2. [sitting assisted forward reach \(elevation\)](#)
3. [standing wall-assisted forward flexion](#)
4. Cane-Assisted External Rotation at [20 degrees](#), [45 degrees](#) and [90 degrees](#)
[Abduction / seek guidance for external rotation in the OR report](#)
5. [Doorway Standing External Rotation/ seek guidance for external rotation in the OR report](#)
6. [Scapular plane Abduction to Tolerance](#)
7. [Active Range of Motion Forward Flexion in the Scapular Plane](#)
8. Active Range Of Motion External Rotation in Multiple Positions: [Side-Lying](#) or [Sitting](#)

Phase III – Early strengthening phase (week 9-16):

Goal:

- Continue to improve motion by stretching program
- Start strengthening first with elastic bands and then light weights
- Improved return to many activities but not yet sports.

Precautions:

- Avoid heavy lifting of objects (no heavier than 5 lbs.)
- Avoid sudden lifting or pushing activities
- Avoid sudden jerking motions
- Avoid heavy lifting of objects (no heavier than 5 lbs.)
- Avoid heavy sudden lifting or pushing activities

Exercises and Online Videos (click on links below):

Start of strengthening with elastic bands and light weights is defined by the surgeon or his team. Check your operative report to make sure it is consistent with this timing:

1. [Active Range of Motion External Rotation with Band Strengthening](#)
2. [Active Range of Motion Internal Rotation with Band Strengthening](#)
3. [Row with Resistance Band](#)
4. [Towel/Hand-assisted Internal Rotation Stretch](#)
5. [Side lying Internal Rotation Stretch at 70 and 90 Degrees](#)
6. [Cross-Body Stretch](#)
7. Water (pool) therapy Standing in water with float under arm, lower body into water to help stretch into flexion
8. Standing in water with float under arm, lower body to side to help with external rotation
9. Apply a hot compress or shower in warm water before stretching. After completing your exercises application of ice or a cold compression device will reduce pain and inflammation.

Phase IV Advanced strengthening phase and return to sports participation (week 13-22):**Goals:**

- Continue to work on recovering non-painful active motion doing the exercises outlined above
- Advance conditioning exercises will be added to increase endurance and strength
- Gradual return to skill sports such as tennis, golf, swimming can begin now

Exercises and Online Videos:

- [Side-lying External Rotation with Towel](#)
- [Full Can in the Scapular Plane](#)
- [Prone Scaption](#)
- [Diagonal](#)
- [Dynamic Hug](#)
- [Internal Rotation at 90 Degrees Abduction](#)
- [Forward Band Punch](#)
- [Sitting Supported External Rotation at 90 Degrees](#)
- [Standing Unsupported External Rotation at 90 Degrees](#)
- [Biceps Curl](#)

Phase V – Return to full activity (week 23):

Goals:

- Gradual return to strenuous work activities
- Gradual return to recreational activities, including sports
- Continue strengthening
- Continue stretching, if you continue to be tight

Precautions:

Avoid impact loads (ie. heavy carpentry work, chopping wood or similar activities)

Avoid falling and activities that could increase your risk for falling, such as skiing.
Falling could damage the prosthesis or cause a dislocation.