

## Overview

Each year, nearly 24,000 patients undergo shoulder replacement surgery. While total shoulder arthroplasty (TSA) was initially used in the treatment of shoulder fractures in the 1950's, the procedure has also evolved into an alternative solution to pain that is secondary to severe osteoarthritis and rotator cuff arthroplasty.

Patients with a longstanding history of shoulder arthritis, tears of the rotator cuff muscles or remote shoulder fractures will typically experience some of the following signs and symptoms:

- Shoulder stiffness and decreased range of motion
- Pain with activities
- Tenderness around the joint

For patients that have failed conservative treatment with anti-inflammatory medication, physical therapy, and even injections, TSA is a viable option. The primary goal of undergoing TSA is to relieve shoulder pain. While motion of the shoulder will likely improve after surgery, this is not guaranteed to change significantly.

After a thorough physical examination and evaluation of necessary imaging studies including x-rays as well as MRI or CT scans, your surgeon will decide on one of the replacement options discussed below. This information packet aims to prepare you for your upcoming surgery and to answer any questions that you might have about the pre or post-operative rehabilitation. If at any time you require further assistance, please contact our office at 1.866.974.CORE (2673).

## Before Surgery

In preparation for surgery you will likely need to obtain preoperative clearance from your primary care physician (PCP). This most often includes a visit to your PCP where blood work, a chest x-ray, and EKG are routinely performed. Please contact your PCP as soon as you have decided to undergo surgery so that the preoperative clearance is completed well in advance of your surgery date. If you also see a cardiologist, you may need additional medical clearance.

Certain over-the-counter medications have the potential to cause increased bleeding during surgery and have also been shown to delay bone and soft tissue healing.

Do not take any of the following medications within 10 days prior to your surgery: Ibuprofen, Excedrin, Advil, Mobic, Naprosyn, Aleve or any other NSAID for pain relief.

If you are currently taking any prescribed blood thinners such as **Plavix** or **Coumadin (Warfarin)**, these must be stopped (only with the permission of your PCP) at least 10 days prior to surgery. Most blood thinners will be restarted during your stay in the hospital unless otherwise specified by your PCP.

## Preoperative Visit

You will be scheduled to have a preoperative visit with either the physician assistant (PA) or your surgeon. At that visit you will have a chance to ask any additional questions and you will also receive a sling that you will need to take with you to the hospital the morning of surgery.

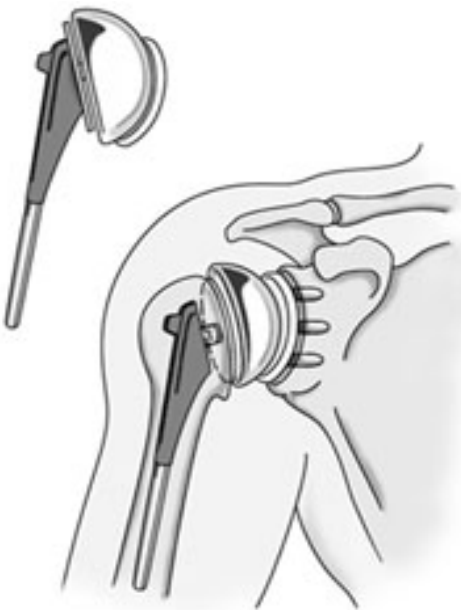
## Surgery Types

The following is a description of the different types of shoulder replacement options. Depending on your physical exam, imaging studies, and symptoms, your surgeon will discuss with you the most appropriate option.

### Hemiarthroplasty

Depending on the condition of the shoulder, your surgeon may replace only the ball or "humeral head".

This type of surgery is typically performed when the socket or "glenoid" of the shoulder is normal or after a severe fracture to the head of the humerus.



### Total Shoulder Arthroplasty

For patients with severe arthritis of both the ball and socket and intact rotator cuff tendons, a conventional total shoulder replacement is the most appropriate procedure.

The head of the humerus is replaced with a metal ball while the socket or glenoid is replaced typically with a plastic component.

## Reverse Shoulder Arthroplasty

As the name implies, a reverse shoulder arthroplasty involves switching the orientation of the ball and socket. In patients with arthritis and completely torn rotator cuff tendons, or patients with a failed previous shoulder replacement of a different type, this is the only option available.

By reversing the mechanics of the shoulder with this prosthesis, the patient is then able to use the deltoid muscle to lift the arm.



## Day of Surgery

Do not eat or drink anything after midnight prior to your surgery. Additionally, you should not take any medication on the morning of surgery unless specifically instructed to do so by your PCP or surgeon.

You will arrive to the hospital approximately two hours prior to the start of surgery to allow time for any additional blood work or testing. The surgical procedure will last between two and three hours and will be done under general anesthesia. An incision approximately four to six inches in length starting just below the end of the collar bone and extending down the front of the shoulder will be made.

At the end of surgery, a large bulky dressing will be placed over the incision and the anesthesiologist will likely perform a nerve block on the shoulder. The nerve block is done while you are under anesthesia and will help to significantly alleviate the pain for the first 24 to 48 hours. A small catheter may be left in the shoulder to continuously deliver anesthetic. This will be removed by the nursing staff typically by the second day after surgery.

## Sling

You will be wearing a sling when you awake after surgery that you will wear consistently for four to six weeks. The sling must remain in place at all times which includes sleeping, with a few exceptions:

- The sling can be removed to bend and straighten the elbow, wrist and fingers three to four times per day.
- If you are instructed to begin passive range of motion (PROM) exercises by your physical therapist.
- When showering you may carefully remove the sling and keep the arm held at your side.
- To remove the sling, undo the Velcro and slip off your sling. Your elbow should not leave the side of your body while removing your sling.

## **Hospital Stay**

All patients are admitted to the hospital after shoulder replacement and most will stay between two and four days after surgery, depending on their level of comfort. On the first day after surgery a physical therapist will work with you to begin gentle range of motion exercises. When you are feeling well enough to be discharged you will be given oral pain medication prescriptions and should have arrangements (made preoperatively) for a physical therapist to visit your home throughout the next couple of weeks.

## **Pain Control**

*Percocet* is what is normally prescribed and can be taken as follows: one or two pills every six hours as needed for pain. Your narcotic medication has Acetaminophen (Tylenol) combined with it, and for this reason Tylenol should not be taken in addition to your pain medication. You will also receive a longer acting narcotic, *Oxycontin* that may be taken once every 12 hours for pain.

## **After Hospital Discharge**

### **Follow up Visits**

You should follow up with your surgeon or the PA two weeks after your surgery date for a wound check and possible staple or suture removal. You will then most likely have follow up visits monthly or bi-monthly as needed to monitor your recovery.

If at any time after discharge from the hospital you develop a fever greater than 100.3 degrees, increased redness or swelling around the incision, or any drainage from the wound, please contact our office immediately.

### **Wound Care**

You do not need to change your bandages. Your initial bandage will be changed before you leave the hospital. Your bandage should remain on until changed in the office at your two week follow up. This bandage is usually a plastic adhesive over cotton which is not water proof. You must keep your bandage clean and dry, otherwise your chance of infection increases.

### **Ice**

Apply ice to your shoulder for 20-30 minutes each session for the first 48 to 72 hours. Ice therapy will help reduce the swelling and decrease pain. Do not apply ice directly to the skin. After the first few days, apply ice as needed for pain relief.

### **Showering**

Showering can be difficult as you must keep your incision site clean and dry. You may carefully remove the sling and keep the arm held in sling position. When in the shower, face your surgical shoulder towards the wall away from the shower head. Aim the shower head down towards the middle of your body. Do not move your surgical arm away from your side to wash under the arm; you can slide a towel through that area for cleaning.

## **Driving**

Driving a car is not recommended for four to six weeks after surgery until you have safely transitioned out of the sling and are no longer taking narcotic pain medication.

## **Rehabilitation**

Once home from the hospital you should have a physical therapist visit your home for one or two weeks unless otherwise specified by your surgeon. The therapist will guide you through exercises that you should perform two to three times daily. After approximately two weeks you will transition into an outpatient physical therapy program.

## **Physical Therapy**

Physical Therapy (PT) is a key element in rehabilitation after shoulder replacement surgery. Most patients will require up to three months of intensive PT two to three times per week to achieve their postoperative goals. A careful, well-planned rehabilitation program is critical to the success of a shoulder replacement. Your rehab will progress in four phases:

### **Phase One**

The first phase is the healing phase which lasts from four to six weeks. During this phase, the subscapularis muscle which is cut and repaired at the time of surgery is allowed to heal. You will not perform active range of motion (AROM) during this period and you will be in a sling.

### **Phase Two**

Phase two begins after four to six weeks; during this time you will remove the sling and actively move your shoulder for all activities of daily living. You will continue to stretch your shoulder during this time period as well.

### **Phase Three**

The third phase involves strengthening the muscles around your shoulder. Your physical therapist will give you a guided program using various exercises, rubber bands, and finally light weights.

### **Phase Four**

Phase four involves the second six months after surgery; this is the maintenance phase where you continue your exercises but you increase the weight and functionality of your shoulder.

## After Surgery Do's and Don'ts

- **Do** follow the program of home exercises prescribed for you. You may need to do the exercises three to five times a day for a month or more.
- **Do** ask for assistance. Your physician may be able to recommend an agency or facility if you do not have home support.
- **Do** avoid placing your arm in any extreme position, such as straight out to the side or behind your body for the first six weeks after surgery.
- **Do** take antibiotics before having any procedure done (i.e. Dental, urological) after joint replacement.
- **Don't** use the arm to push yourself up in bed or from a chair because this requires forceful contraction of muscles.
- **Don't** overdo it! If your shoulder pain was severe before the surgery, the experience of pain-free motion may lull you into thinking that you can do more than is prescribed. Early overuse of the shoulder may result in severe limitations in motion.
- **Don't** lift anything heavier than a glass of water for the first six weeks after surgery.
- **Don't** participate in contact sports or do any repetitive heavy lifting after your shoulder replacement.

We look forward to the opportunity to participate in your care. At any time please feel free to contact our office with additional questions or concerns 1.866.974.CORE (2673).