



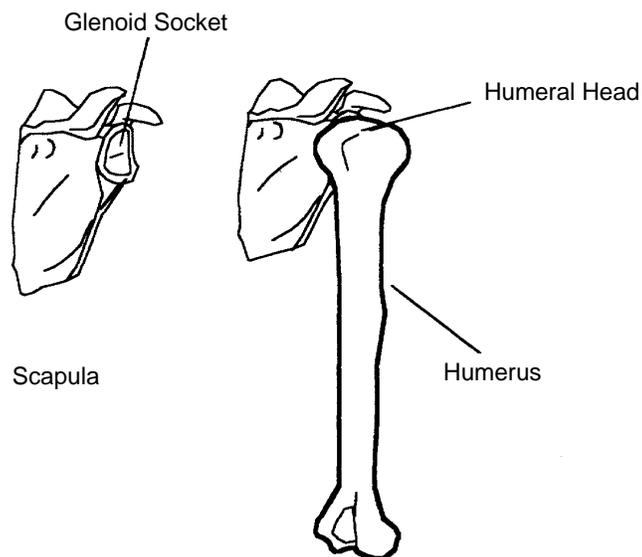
# Shoulder Replacement

*Arthroplasty to repair your shoulder*

**When you have arthritis in your shoulder, moving your shoulder becomes painful. You may have trouble with tasks such as lifting or tucking in your shirt. This booklet explains shoulder replacement surgery and other types of repair surgeries for shoulders. It also gives tips that may help if you decide not to have surgery.**

The major joint of your shoulder is the glenohumeral joint. It is formed by the socket (glenoid) of your shoulder blade and the ball-shaped end of your upper arm bone (humerus). The ball fits into the socket, so the bones can rotate when your arm moves. Ligaments (slightly stretchy bands of tissue attached to the bones) hold your shoulder in place. The ligaments form a capsule, which holds a small amount of fluid. This fluid and the smooth cartilage on the surfaces of the ball and socket allow them to slide smoothly against each other when the arm moves.

When you develop arthritis in your shoulder, the cartilage becomes broken down and rough due to bone rubbing on bone. Moving your shoulder becomes painful and irritates the joint. The muscles that move your shoulder and the tendons that connect them to the bones may also be irritated or have tears in them.



## **Causes of Shoulder Problems**

There are a number of reasons for breakdown of cartilage:

- Primary degenerative joint disease, or osteoarthritis, is irritation and inflammation of the joint from the breakdown of cartilage due to the normal wear and tear of aging. It is the most likely cause if you are over age 40 and have had no earlier injury or break.
- Secondary degenerative joint disease is rough cartilage due to a previous shoulder injury or problem.
- Rheumatoid arthritis can cause inflammation of the shoulder joint as well as many other joints.
- Capsulorrhaphy arthropathy is breakdown of cartilage from stiffness after surgery for shoulder instability and dislocations.
- Rotator cuff arthropathy is breakdown of the cartilage related to tears of the tendons that connect the muscles and bones of the shoulder are torn.
- Loss of blood supply to the humerus can also cause breakdown of cartilage and pain.

## **Arthritis of the Shoulder**

Regardless of the cause, you have arthritis in your shoulder. This means that the irritation from moving your shoulder with rough or absent cartilage causes pain and loss of motion, stability, strength and smooth movement. You may have trouble lifting weight to shoulder level, tucking in the back of your shirt, and pain trying to sleep. These problems will likely get worse over time as you use your shoulder. Your shoulder may get more stiff and weak. X-rays often show spurs of bone, narrowing of the joint space, and crumbling of the bone, in addition to breakdown of the cartilage.

## Non-Surgical Treatment

You may not want to have surgery on your shoulder. Non-surgical treatment can maintain your shoulder movement but cannot fix the cause or stop the cartilage breakdown from worsening. To help your shoulder, you can:

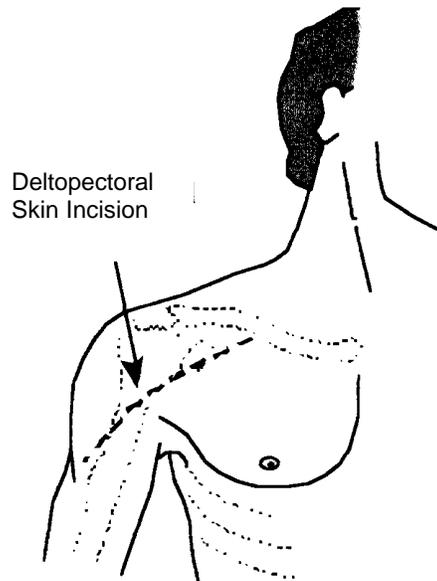
- Do exercises to stretch your shoulder muscles and keep up your shoulder strength.
- Have cortisone injected into your shoulder to decrease the inflammation and some of the pain.
- Take non-steroidal anti-inflammatory pills to reduce the inflammation and pain.
- Live with the pain but change your activities to ones that are less painful.

## Surgical Choices

If you have tried the above treatments but your shoulder still causes you more pain than you wish to live with, you may want one of the surgical choices below:

- Releasing of tight scar tissue from an earlier injury or surgery
- Removing bone spurs
- Cutting out the joint
- Fusing the joint so it cannot move
- Replacing the joint.

The first two procedures listed above can be done arthroscopically. This means that the surgeon fixes your joint using a camera and tools inserted through small slits in your skin and muscles. Recovering, fusing and replacing the joint is another major surgery done through a long cut (incision). Your doctor will talk with you about which surgery will help you the most. It depends on the cause of your arthritis and on how hard you will work on regaining use of your shoulder after surgery.



## **Shoulder Replacement**

Replacing your shoulder with a new joint is called shoulder arthroplasty. It cannot make your shoulder normal, but it can improve its movement and strength and decrease your pain. After surgery, you will need to work on strengthening your muscles, which have become weak while you have not been using your shoulder. Your doctor and physical therapist will help you with exercises. It may take many months for your shoulder to recover as much as it can. Your new shoulder will be good for gentle, repetitive use, such as swimming and golf. However, you will never be able to do activities that need heavy use or involve impact, such as heavy lifting, chopping wood or contact sports.

### **Before Surgery**

Your doctor and the Bone and Joint Center staff will evaluate your shoulder and your overall health. A medical history, physical exam, and x-rays will be taken. You will also be asked to fill out two forms about your shoulder use and how it affects your life. These will all help determine how well you will recover after surgery and how successful surgery will be for your shoulder.

Talk with your doctor about the expected improvement of your shoulder after surgery and the possible risks. The risks include:

- Infection
- Injury to nerves and blood vessels
- Breaking your arm bone
- Muscle weakness or tears
- Stiffness or looseness of the shoulder joint
- Pain
- Wearing out of the new joint or the parts loosening
- Need for more surgery.

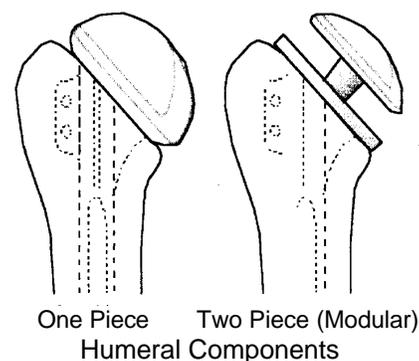
Since shoulder replacement is not an emergency, take time before surgery to get in the best possible condition:

- Try to stop smoking.
- Get over any cold, flu, or infection.
- Tell your doctor everything about your health. Be sure to include allergies, reactions to medicines, and medicines to you take. Some medicines may affect your surgery. For example, aspirin and anti-inflammatory medicines can affect blood clotting.
- Plan how to manage your daily life after surgery. You will be unable to use your shoulder for many activities. Right after surgery, your arm will be less useful than it is now. For example, you will not be able to drive for 6 weeks.
- Talk with your doctor about your risks for surgery, such as the condition of your bones, any medical problems, the chance of stiffness and scar tissue, or poor placement of the new joint.

## Surgical Repair

Once you have decided on surgery, you will meet members of your surgical team: doctors, physician assistants, physical therapists and anesthesiologists. Your surgeon manages this team and all aspects of your care. When you talk with the anesthesiology team, ask about risks of anesthesia. The Surgical Coordinator will decide with you the best date for your surgery.

The goal of surgery is to give you a new stainless-steel-and-plastic joint that will work smoothly and without pain. Shoulder replacement is a good choice if your cartilage is destroyed and you have significant pain and diminished function. Your surgeon will use a one-piece or two-piece artificial joint.



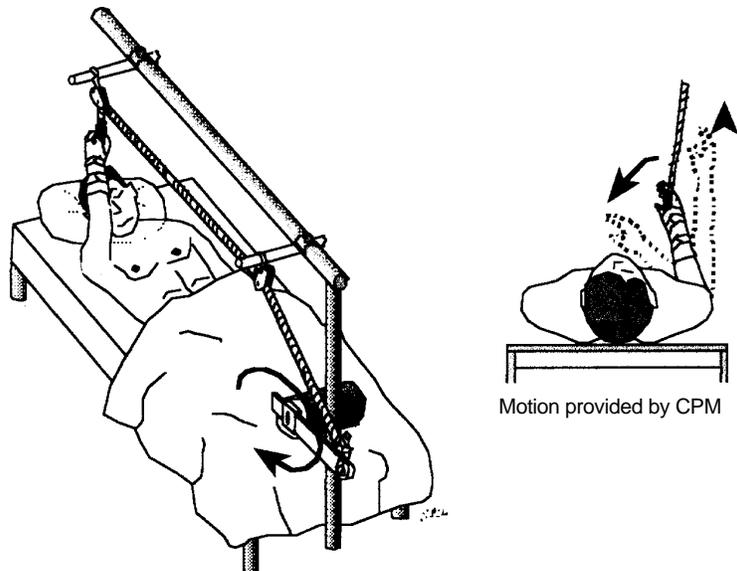
## After Surgery

A gauze bandage will be taped to your shoulder, covering the incision. Under it will be stitches and a small piece of tubing to drain away any fluid. The tubing will be removed in the first few days after surgery. Skin stitches will probably be taken out before you leave the hospital. Deep stitches will dissolve on their own. Leave on the small pieces of tape until they fall off or remove them two weeks after surgery.

Tight stockings and squeezing devices may be put on your legs during surgery to prevent blood clots. For the same reason, you will need to be up and walking after surgery.

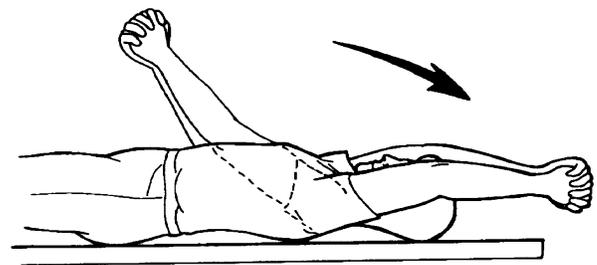
Your shoulder will probably be painful after the anesthesia has worn off. Then, medicine given through your vein (IV) may be used to prevent pain. You may be able to control your pain yourself with a device called patient-controlled anesthesia (PCA). However, pain pills are usually enough to control your pain.

You will need to use a continuous passive motion (CPM) machine for a few days after surgery. It slowly moves your arm for you in order to prevent tissue scarring and stiffness. You will need to be out of bed and walking, but when you are in bed or asleep use the CPM machine. Please tell the staff if you have any trouble or discomfort using the machine.



## Exercising Your Shoulder

You will need to use your shoulder right after surgery to prevent stiffness. You will start using the CPM machine in the recovery room. The morning after your surgery, a physical therapist will show you how to do range-of-motion exercises. In these exercises, you will raise your arm in front of you 140 degrees and rotate it away from your body 40 degrees.



The physical therapist may also show you some strengthening exercises and give you an exercise program that is best for your shoulder and its recovery. The therapist will see you two times a day in the hospital. When you go home, you will need to do the exercises five times a day.

## Restrictions on Moving

### *Right after surgery, you must not:*

- Rotate your arm more than 40 degrees away from your body (external rotation).
- Pull your arm in toward your body against force/resistance (internal rotation).
- Push, pull or do heavy lifting for six weeks.

### *For the long-term, you must not:*

- Do forceful, jerky movements, such as jackhammering, or repetitive impact movements, such as chopping wood.

## Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns. The UWMC clinic staff are also available to help at any time—

**Bone and Joint  
Center  
(206) 598-4288**

## Recovery After Surgery

You can leave the hospital three or four days after surgery if you:

- Can do the range of motion exercises.
- Are pain free using only pain pills.
- Understand the exercise program and restrictions on using your shoulder.

You will go home with a sling but you should remove it whenever possible and use your shoulder for normal daily activities. Slowly use your shoulder more and more. You will probably not need to see a physical therapist, but schedule visits to the Bone and Joint Center:

- 3 weeks after surgery to have your incision and shoulder movement checked.
- 6 weeks for a check on your healing and to add strengthening exercises.
- 3 months to move on to more strengthening exercises.

Do not return to sports that use your shoulder hard until six months after surgery. Any infection needs to be treated with antibiotics so it does not spread to your shoulder. Before dental work, tell your dentist you have a shoulder replacement. The dentist should give you an antibiotic that is used for a person with a heart valve replacement.

A new shoulder joint is a very good way to treat breakdown and roughness of the cartilage. The parts will not wear out as long as they are placed correctly and your humerus is strong. After surgery, you should be able to do many activities that you could not do before or were painful to do. For a successful recovery, you will need to work hard on your shoulder exercises and slowly increase the use of your shoulder again. Your shoulder should be fine and not need to be seen after your three-month visit, but please call the Bone and Joint Center if you have problems.



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