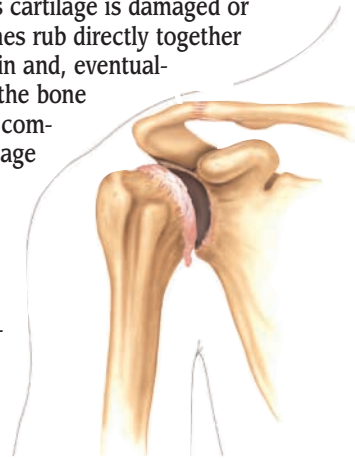


WHY DOES MY SHOULDER HURT?

The shoulder is a ball and socket joint that is made up mainly of two bones. The ball portion of the joint is part of the upper arm bone (humerus). The socket portion is part of the shoulder blade. The ball fits into the socket and the two bones rub together as the shoulder moves.

In a normal, healthy shoulder joint, the surfaces of these bones where the ball and socket rub together are very smooth and covered with a tough protective tissue called cartilage. This spongy layer of tissue prevents direct contact between these bones and allows the two bones to move without creating friction or wear on the bone surfaces.

However, when this cartilage is damaged or worn away, the bones rub directly together causing friction, pain and, eventually, deterioration of the bone surfaces. The most common causes of damage to cartilage are the various types of arthritis. There is no medication or treatment that will make damaged cartilage grow back.



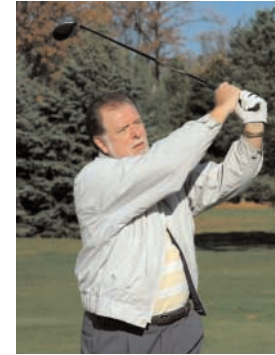
This flyer is intended to provide an overview of shoulder replacement surgery. It is not intended to promote shoulder replacement or provide instructions for preoperative preparations or postoperative recovery. Consult your doctor for advice concerning your situation.

PATIENT EDUCATION

Shoulder Replacement

A guide to understanding shoulder replacement surgery

RESTORING ARM MOVEMENT



If you suffer from a stiff, painful shoulder, you probably avoid many of the activities that you used to enjoy. Even simple tasks like brushing your hair, dressing yourself, or carrying groceries can be difficult without full use of your shoulder.

Depending on the cause, there are many ways to treat the pain in your shoulder. One way is through shoulder replacement surgery. Shoulder replacement has reduced the pain and improved the lives of thousands of patients. In fact, more than a half million shoulder replacements have been performed in the United States alone. And more than 20,000 new patients undergo this surgery every year.

The first modern shoulder replacement surgery was performed in 1953. Since then, the implants and the techniques have steadily improved. Although nobody can guarantee a perfect outcome for you, shoulder replacement can lead to less pain, greater strength, and better movement in the shoulder.

The decision to have shoulder replacement is not an easy one to make. There are many factors to consider, and after careful consultation with your doctor and loved ones, only you can make the final decision.

This flyer will help answer some of the questions you may have. If you have additional questions, or want more details about the points discussed here, do not hesitate to talk to your doctor.



WHAT IS SHOULDER REPLACEMENT?

In shoulder replacement surgery, the parts of the bones that rub together are resurfaced with metal and plastic implants. Using special, precision instruments, your surgeon will remove the damaged parts of the bones. The replacement parts will then be fixed into place.

The part that replaces the ball consists of a partial sphere made of metal. This partial sphere sits on top of a long metal stem that fits down into the shaft of the upper arm bone. The part that replaces the socket consists of an oblong plastic disk with a cupped surface. The partial sphere fits into this cupped surface to create the joint.

Often, both parts of the joint are replaced; however, sometimes it may only be necessary to replace the ball portion of the joint. Your surgeon will determine what is best for you.

HOW WILL I KNOW IF I SHOULD HAVE SHOULDER REPLACEMENT?

Your orthopaedic surgeon will perform a very thorough examination of your shoulder. This will include a check of the muscles and tendons to determine how much strength and range of movement you have.

Your surgeon will also ask you many questions to determine your medical history. For example, you will be asked to describe your pain and how you have treated this pain in the past. You will also be asked about other joint problems, and about injuries, infections, and other disorders you have experienced in your life that may have affected your shoulder. Your surgeon will also want to know what medications you are taking.

Finally, your surgeon will take x-rays, a CT scan (computer tomography), or an MRI (magnetic resonance imaging) which will be used to further

assess the condition of your shoulder joint. If you decide on shoulder replacement surgery, these images will also be used to help your surgeon select the best type and size of artificial shoulder.

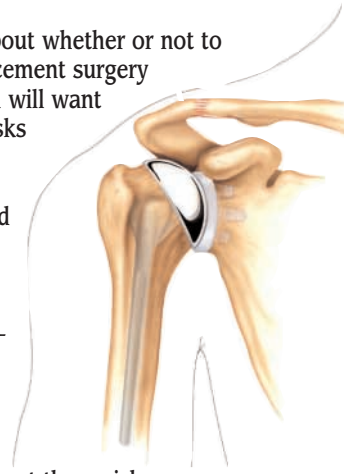
Based on this examination, your surgeon will determine whether you are a candidate for shoulder replacement. Although widely practiced, shoulder replacement is a major surgical procedure and should only be considered when all other treatment methods have failed. There are more conservative alternatives which you and your surgeon may want to consider. These include medications or injections for pain and inflammation, physical therapy, or other types of surgery.

The final decision about whether or not to have shoulder replacement surgery will be yours, so you will want to understand the risks involved. There are potential complications both during and after surgery. Generally, these include infection, blood clots, pneumonia, implant loosening, and nerve damage. Your surgeon can answer your specific questions about these risks.

WHAT IS IT LIKE TO HAVE SHOULDER REPLACEMENT SURGERY?

Before Surgery

If you and your surgeon decide that shoulder replacement is right for you, a date will be scheduled for your surgery. Several things may be necessary to prepare for surgery. For example, your surgeon might ask you to have a physical examination by your primary care physician.



During Surgery

On the day of surgery, a small tube (intravenous line) will be inserted into your arm. This tube will be used to administer fluids, antibiotics, and other medication during your surgery. You will then be taken to the operating room and given anesthesia. After the anesthesia takes effect, your shoulder will be scrubbed and sterilized with a special solution.

The surgery will begin with an incision over your shoulder that will expose the joint. When the bones are fully visible to the surgeon, special precision guides and instruments will be used to remove the damaged parts of the bones and shape the bones to accept the implants.

The implants are then secured to the bones either by using a special bone cement, or by fitting the implants very tightly into the bone so they are held in place by friction. It might also be necessary to adjust the ligaments that surround the shoulder in order to achieve the best possible shoulder function. When the surgeon is satisfied with the fit and function of the implants, the incision will be closed.

A tube may be inserted into the wound to drain the fluids that naturally develop at the surgical site. A sterile bandage and ice pack will then be applied, and you will be taken to the recovery room, where you will be closely monitored. Your surgery will likely take between two and three hours, depending on your individual circumstances.

Immediately After Surgery

As your anesthesia wears off, you will slowly regain consciousness. A nurse will be with you, and may encourage you to cough or breathe deeply to help clear your lungs. You will also be given pain medication. When you are fully awake and stable, you will be taken to your hospital room. Your shoulder will remain swollen and tender for a few days and, initially, may appear bruised.

WHAT CAN I EXPECT AFTER SURGERY?

When you are back in your hospital room, your nurses will check your dressing and give you pain medication as needed. Your arm will probably be in a sling or brace to help protect your shoulder and make you more comfortable. You may be asked to sit on the edge of your bed or even get out of bed and take a few steps.

Soon after your surgery, you will begin a gentle exercise program that will help you regain strength and range of movement in your shoulder. This program will be designed specifically for you. It may begin with simple movements of your fingers, wrist, and elbow. Eventually, the exercises will include movement of your shoulder. Your physical therapist will teach you to perform appropriate exercises at home.

You will be discharged when your surgeon determines that you have recovered sufficiently. You can expect to stay in the hospital anywhere from one to three days after your surgery, depending on your individual circumstances. Your bandages may be removed before you leave the hospital, but your stitches will probably not be removed for 10 to 14 days after surgery.

At home, you will need to continue your exercises to help regain strength and prevent stiffness. Your physical therapist will instruct you about proper home care, and may continue to work with you at home. Your therapy may continue for several weeks after surgery. Your doctor or therapist will tell you when and whether you should begin to drive and perform other activities.

Successful shoulder replacement surgery may relieve your pain and stiffness, and may allow you to resume some of your normal daily activities as instructed by your doctor. But even after you have fully recovered from your surgery, you may still have some restrictions. Normal daily activities for shoulder replacement patients do not include contact sports or activities that put excessive strain on your shoulder. Although your artificial shoulder can be replaced, a second implant is seldom as effective as the first.