

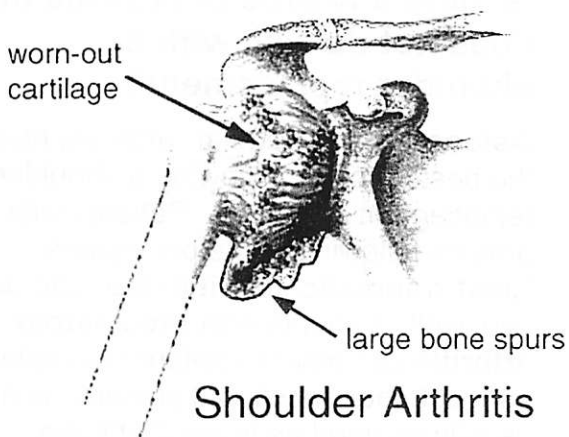
# InfoSheet – Shoulder Arthritis

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## What is shoulder arthritis?

Arthritis is a condition that occurs in various joints in the body, especially in the knees, hips, hand, and spine. It can affect any joint, but the shoulder is affected infrequently.

When arthritis occurs, the cartilage that covers the ends of the bones making up the joint breaks down and often flakes off into the joint. The joint becomes swollen and stiff, and the lining tissue of the joint (the synovium) becomes overgrown.



Frequently, spurs will develop around the margins of the joint and can even break off inside the joint. The pain from arthritis can vary from none to very severe, depending upon many factors, including the severity of the disease, the type of arthritis (degenerative arthritis or rheumatoid disease) and the activity level.

## Who usually gets arthritis?

Anyone can develop arthritis, but it most often occurs in middle-aged patients and seniors. The condition may occur spontaneously or as a late result of previous trauma, such as fracture or dislocation. It also may occur as a result

of an inflammatory disease such as rheumatoid arthritis.

## How do I know if I have arthritis?

The shoulder joint becomes stiff, feels heavy, and fatigues easily when arthritis is present. The stiffness is usually worse in the morning, and can slowly improve with "warm up activities." Mechanical grinding and catching in the shoulder is a common sign of arthritis.

## What tests can the doctor do to prove if arthritis is present?

Most advanced cases of arthritis can be diagnosed with an x-ray evaluation of the shoulder. Sometimes, with rheumatoid or other types of "inflammatory" arthritis, special blood tests or other evaluations are needed.

## What is the best treatment for arthritis of the shoulder?

The treatment of shoulder arthritis depends on how disabling and painful the disease is. Often your doctor will refer you to a rheumatologist who specializes in treating arthritis with medications.

Anti-inflammatory medications taken by mouth can be helpful. Additionally, some people benefit from injected cortisone-type medications. These can reduce pain and help increase motion, but their use is limited.

Keeping your motion by using your shoulder, even if it is painful, is much better than trying not to use the shoulder. Physical therapy, particularly hydrotherapy (swimming pool), is very soothing, helps maintain or regain range of motion of the joint, and strengthens the surrounding muscles.

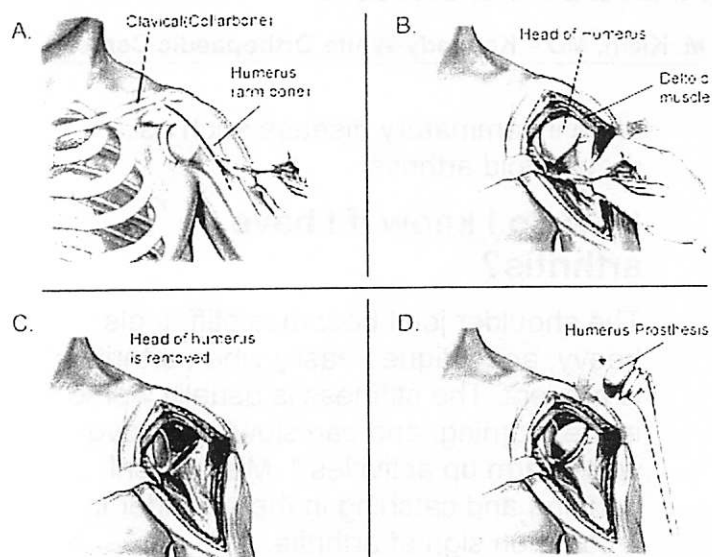
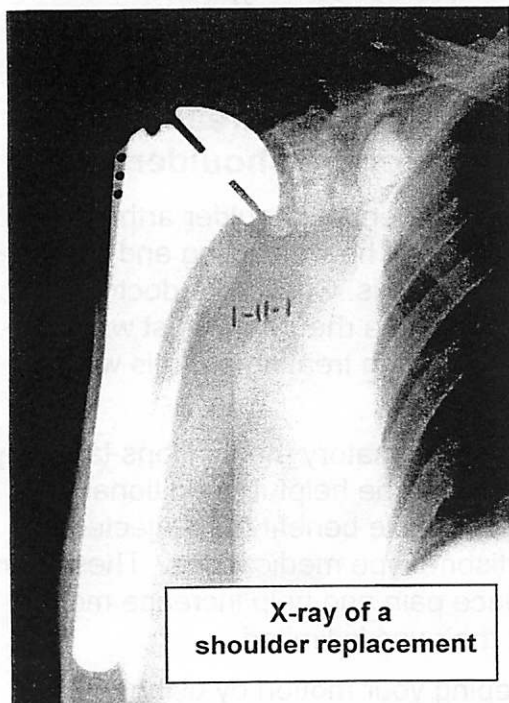


Figure – Shoulder replacement surgery

If the arthritis is advanced, causing severe pain and disability, then your doctor may consider an operative procedure. In severe disease, the only surgical treatment is a joint replacement.



X-ray of a shoulder replacement

This is a very good operation for pain relief and often will restore some motion, but it has its limitations. The joint surfaces are surgically replaced through an incision in the front of the shoulder, and a metal ball and plastic socket are inserted.

These parts together are called a prosthesis. The prosthesis will move more smoothly than the damaged joint and should reduce the pain in your shoulder. Your doctor may choose to use only the ball and stem portion of the prosthesis. This is known as a *hemiarthroplasty*. A *total shoulder arthroplasty* is needed if the glenoid (curved area where the humerus inserts into the joint) must also be replaced.

Joint replacements are designed to help you continue with your daily occupations. They are not meant to hold up to the stresses of rigorous activities or sports requiring extensive shoulder use.

### Is there any type of arthritis that does not do well with a shoulder replacement?

**Osteoarthritis** (“regular” arthritis) has the best outcome following a shoulder replacement operation. Patients with arthritis following some old injuries (**post-traumatic arthritis**) also can do very well. Patients with **rheumatoid arthritis** can have excellent pain relief, although their functional outcome is not usually as good as those that have osteoarthritis.

People with a special type of arthritis that follows a rotator cuff tear, known as **rotator cuff arthropathy**, do poorly with standard total shoulder replacements. For this class of arthritis, a newer type of joint replacement, called a *reverse ball and socket prosthesis*, may offer better outcomes.

### What are some of the risks of the replacement surgery?

The risks of total shoulder replacement are those of any standard surgical procedure and include infection, anesthesia risks (including death), nerve and vascular injury about the shoulder,

and failure of the operation. If the operation fails, it may result in stiffness or sometimes a loose joint. If the joint becomes loose, it may either have to be redone at a future date, or re-operated upon to have the ligaments or muscles tightened. In the shoulder joint, this is quite a rare occurrence, although long-term follow-up is not yet known.

### What is the postoperative treatment after shoulder replacement?

The arm is kept in a sling at the patient's side following a shoulder replacement operation, for protection of the repaired tendons and ligaments. Exercises begin on the day after surgery, and include movement of the elbow, wrist and hand, and exercising the grip with putty. Shortly thereafter, rotational pendulum exercises can be added. Strengthening exercises begin at about six weeks when the brace or sling is removed. This delay is necessary to allow the tissues that were opened at the time of surgery to heal.

### What other operations may be needed?

Joint replacements may become loose or wear out over time. If this is the case with your shoulder replacement, you may need to have another shoulder replacement operation, known as a **revision**. The number of years until this is necessary, or even if it will be necessary for each patient, cannot be predicted.

Other operations may be needed in a small number of patients. If the closure of the tendons ruptures after the replacement procedure, another operation may be needed to re-repair the tendons. If the joint replacement develops an infection, surgery may be needed to wash out the bacteria, or

even to exchange the metal and plastic components. These conditions are rare following shoulder replacements.

### How long will it take my shoulder to improve to its maximum?

The shoulder will generally continue to improve quite steadily up to six months after surgery. After that point, activity can increase slowly as muscle strength continues to improve. It is very important to continue an exercise program to regain and maintain excellent muscle strength around the new shoulder joint.



**Figure:** A happy total shoulder patient!  
(note that the **right** shoulder has been replaced – the **left** side, held lower, has some mild arthritis)