



# Understanding Total Shoulder Replacement Surgery

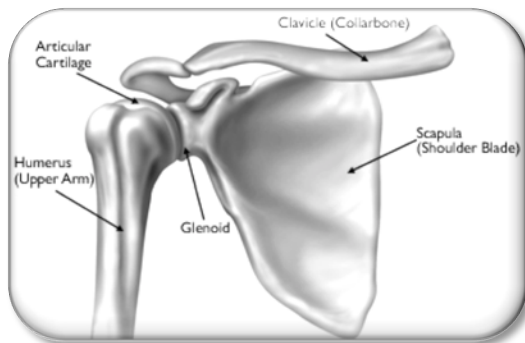


William T. Pennington, M.D.  
wpennington@theorthoinsitute.com

Our goal at The Orthopedic Institute of Wisconsin is to provide high quality care, both non-surgical and surgical. This approach allows our patients to regain lost function and experience pain relief that will hopefully result in the improvement of their quality of life. If you have any additional questions, please call: (414) 643-8800

## Understanding Shoulder Anatomy

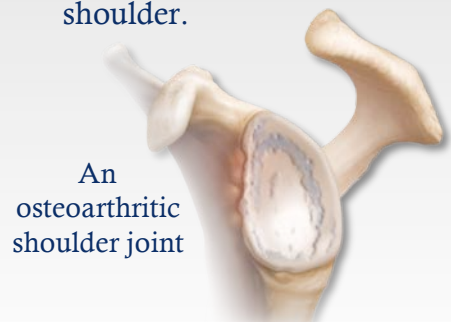
The shoulder is a large ball and socket joint composed of bones, tendons, muscles, and ligaments. The bones of the shoulder joint include: your collarbone (clavicle), upper arm bone (humerus), and shoulder blade. The rounded head of the humerus fits into a shallow socket in the shoulder blade, known as the glenoid. The bone surfaces that meet are covered with articular cartilage, a smooth material that protects the bones and allows them to slide easily. The muscles, tendons, and ligaments surrounding the shoulder provide stability and support.



OrthoInfo. "The Bones of a Healthy Shoulder Joint."  
<http://orthoinfo.aaos.org/topic.cfm?topic=A00094>

## Reasons for Shoulder Replacement

- *Osteoarthritis* – The cartilage covering the bones in the shoulder joint has worn down, causing painful bone-on-bone contact, swelling, and often the formation of bone spurs.
- *Fractures*
- *Rheumatoid Arthritis* – Inflammation in the shoulder joint causes the cartilage to be worn away.
- *Avascular necrosis* (“*Bone death*”) - caused by disruption of the blood supply to the bones in the shoulder.



An osteoarthritic shoulder joint

## Who Needs a Shoulder Replacement?

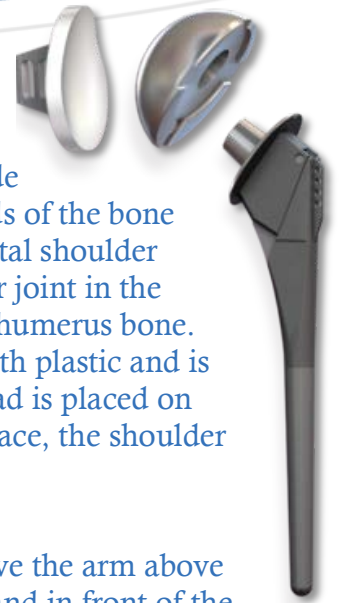
The need for shoulder replacement surgery is a result of deterioration of the cartilage in the shoulder’s ball-and-socket joint. This causes many patients severe pain that can limit their daily activities and affects their sleep.



Arthrex Inc. "Total Shoulder Arthroplasty."  
<http://www.arthrex.com/shoulder/total-shoulder-arthroplasty>

## The Surgery

This surgery, typically lasting 60-90 minutes, removes the damaged areas and replaces them with an artificial shoulder joint. An incision is made on the front of your shoulder and the damaged ends of the bone are removed and replaced with prosthetics. This total shoulder system mimics the natural anatomy of the shoulder joint in the body. The titanium alloy stem is placed inside the humerus bone. The glenoid component is made of a special, smooth plastic and is cemented into place. A cobalt-chrome rounded head is placed on the top of the stem. Once the components are in place, the shoulder joint is checked for stability and range of motion.



## Post-Operative Restrictions

Patients are typically kept in a sling after surgery to serve as a reminder not to move the arm above shoulder level or behind their back. Gentle range of motion below shoulder level and in front of the body is allowed. Many patients have difficulty finding a comfortable sleeping position at first and find that sleeping in a recliner or propped up with pillows is more comfortable, although you may sleep in a bed anytime.

### Typical Schedule of Follow-up Visits

Seven-to-ten day assessment:

- Take x-rays, if not done post-op
- Check the incision & remove staples
- Setup physical therapy
- Evaluate pain level

Five to seven week assessment:

- Check the surgical site
- Evaluate range of motion
- Evaluate ability to start a strengthening program and daily activities
- Discuss returning to work if you have not already done so

Long-term assessments:

- Evaluate range of motion & strength
- Evaluate performance of daily activities

## Physical Therapy

Following your surgery, you will be given a continuous passive motion (CPM) machine to assist with early motion. Physical therapy is typically started two weeks after the procedure and should be attended two to three times per week. After spending time with your physical therapist, you will learn how to perform your exercise program on your own at home.

When you do not have supervised physical therapy, it is crucial that you continue your physical therapy program at home.

## Long-Term Expectations

Each year following your surgery, Dr. Pennington will want to see you in the office in order to measure your progress and to examine your shoulder replacement. Follow-up visits are a very important way for Dr. Pennington to provide you with advice and to assist you in minimizing any risk of complications. Patients who have joint replacements are at risk for infections of the implanted joints. In order to minimize this risk, you will need antibiotics before any invasive procedures. In the case of required dental work or cleanings, you will be placed on antibiotics in order to reduce the danger of infection.

