

SHOULDER REPLACEMENT SURGERY

Often severe pain and stiffness in the shoulder limits daily activities and can cause discomfort. One of the leading causes of this type of pain is osteoarthritis. In people with osteoarthritis, their shoulder cartilage has worn away after years of use. Without cartilage, bone rubs on bone. This results in stiffness and pain in the joint. Other causes of severe shoulder pain include rheumatoid arthritis, fracture, rotator cuff tear and a loss of blood supply to the shoulder (avascular necrosis).

If medication and physical therapy no longer help with pain or mobility, a physician often leads a patient to a total shoulder replacement to address the pain.

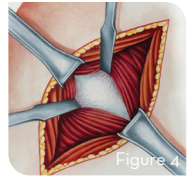
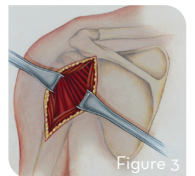
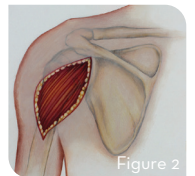
POSTERIOR TOTAL SHOULDER REPLACEMENT

Dr. R. Michael Greiwe, an affiliated orthopaedic surgeon with OrthoCincy Orthopaedics & Sports Medicine practicing at St. Elizabeth Healthcare, was the first to perform a posterior shoulder replacement surgery. This surgery is often called a “rotator cuff-sparing shoulder replacement.” It’s a minimally invasive procedure that allows for faster healing and less pain.

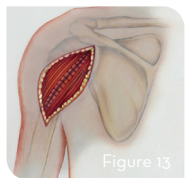
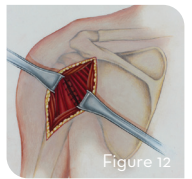
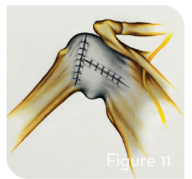
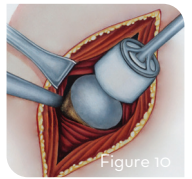
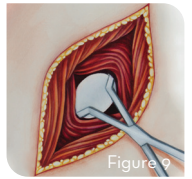
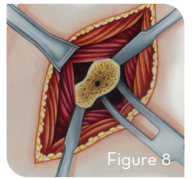
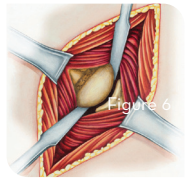
STEP-BY-STEP GUIDE TO SURGERY

The surgery usually takes one to two hours but can take longer for more complicated cases. It is performed under general anesthesia with an additional nerve block to help control pain following surgery.

- The patient lies on his or her side with the injured shoulder facing the ceiling. [Figure 1]
- An incision is made on the back of the shoulder near the end and middle third of the deltoid muscle. This allows access to the joint without cutting muscles or tendons of the rotator cuff. [Figure 2]
- The deltoid muscle is separated using surgical instruments. [Figure 3]
- A small shoulder muscle called the teres minor (part of the rotator cuff), and the rotator cuff's large stabilizing muscle called the infraspinatus are lifted and separated. This exposes the shoulder joint capsule, a ligament that surrounds and supports the shoulder joint. [Figure 4]
- A T-shaped incision is made in the capsule to expose the humeral head. The shoulder is a joint made up of a ball and socket. The humeral head is the ball section of the shoulder's ball and socket joint. [Figure 5]



- Any bony growth along the humeral joint is removed. [Figure 6]
- A saw is used to cut the humeral head while the bone remains in position.
- The bicep tendon is released from the shoulder joint using heat (electrocautery).
- The labrum, a cup-shaped piece of cartilage that reinforces the shoulder's ball and socket joint, is removed.
- Surgical instruments called retractors are used to provide open access to the shoulder's glenoid cavity, allowing better access to the ball and socket joint. [Figure 8]
- The glenoid cavity is prepared for fitting the trial shoulder joint components. [Figure 9]
- A mini C-arm device confirms the precise removal of the shoulder bone.
- The artificial humeral head is prepared and implanted. [Figure 10]
- The surgeon then checks the artificial shoulder joint for size and placement.
- The T-shape incision in the capsule is repaired with sutures. [Figure 11]
- The rotator cuff muscles are then restored and put back into place. [Figure 12]
- The split in the deltoid muscle is then repaired. [Figure 13]



RECOVERY FROM SURGERY

With rotator-cuff sparing shoulder replacement surgery, you'll need to wear a sling for only a few days following surgery and then as needed. You can begin using your shoulder joint as tolerated, avoiding moving your arm across your body in a horizontal movement. In a traditional shoulder replacement surgery, there are generally more restrictions on your movements, and physical therapy is required for three to four months following surgery.