Understanding Shoulder Replacement Surgery

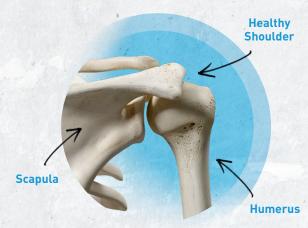


If your surgeon has recommended shoulder replacement surgery, this guide will help you understand more about the procedure which is designed to relieve pain and allow you to return to the activities you want and need to do in your daily life.

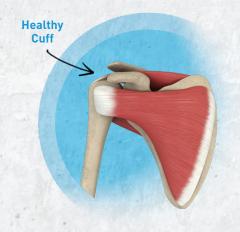


Shoulder Anatomy

The shoulder joint is a ball-and-socket type joint where the humerus (upper arm bone) rotates within the glenoid cavity of the scapula (shoulder blade). The ends of each of these bones are surrounded by a smooth lining of tissue called cartilage which allows the bones to glide against each other without friction and pain.



The rotator cuff is a set of four muscles and tendons which surround the shoulder joint, assist with motion and help to maintain the stability of the shoulder.



Shoulder Conditions

Arthritis is a disease that causes the articular cartilage tissue on the surfaces of the bone to break down, leaving the bony surfaces exposed. As these rough bony surfaces grind across each other and there is direct bone-on-bone contact, patients experience pain, swelling and limited motion.

There are many types of arthritis of the shoulder, but these are some of the more common ones:



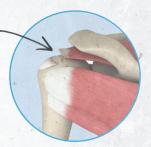
Osteoarthritis is the most common form of arthritis that is also known as "wear and tear" arthritis, often associated with aging.

Rheumatoid Arthritis is disease in which your immune system attacks its own healthy cartilage potentially including those within your shoulder joint.

Post-Traumatic Arthritis is arthritis caused by cartilage damage that is the direct result of a previous injury to the shoulder.

Rotator Cuff Tear Arthropathy

is a type of arthritis unique to the shoulder where a previous rotator cuff tear leads to an unstable joint and results in direct bone-to-bone contact.



Shoulder Replacement Procedures

When nonsurgical treatment of shoulder arthritis does not reduce pain, you may be a candidate for a shoulder replacement procedure. The primary goals of shoulder replacement surgery are to relieve pain and restore motion by replacing the worn bony surfaces with artificial ones that are smooth and have no nerve endings to sense pain. Only the diseased or damaged portions of the bone are replaced on the articulating regions of the bone. Depending upon your specific conditions your surgeon will decide if you are a candidate for an anatomic or reverse shoulder replacement.

Anatomic Shoulder Replacement

An anatomic shoulder replacement removes damaged sections of the bones and cartilage and replaces them with a metallic ball component on the humeral head and a plastic socket component on the surface of the glenoid. This preserves the original

ball and socket orientation of your shoulder.

The Catalyst CSR Anatomic Shoulder Replacement system is designed to maintain most of your existing strong, healthy bone, and can remove up to 72% less bone than competitive systems [Ref 1]. It also minimizes disruption to the surrounding tissues during the operation which can encourage faster recovery. The Catalyst CSR system has been clinically associated with earlier restoration of shoulder motion compared to competitive systems [Ref 2], allowing you to return to your daily activities quicker.

Reverse Shoulder Replacement

If your surgeon decides that your rotator cuff health is too poor to support the function of an anatomic shoulder replacement, you will be considered

for a reverse shoulder replacement. In reverse shoulder replacement surgery, the anatomy is reversed where a metallic ball is secured to the glenoid cavity and a stem with a plastic socket is placed in the humerus. By reversing this anatomy, the deltoid muscle is utilized to help compensate for the

damaged rotator cuff. Once healed, the shoulder acts similarly as it did before any damage or disease occurred. Much like the Catalyst Anatomic system, the Catalyst R1 Reverse Shoulder Replacement system was designed to spare existing bone, and reduce operating time and exposure to anesthesia.

What to expect

A typical shoulder replacement surgery by an experienced specialized surgical team will last one to two hours. After surgery many patients will spend one to two nights in the hospital, though frequently healthy patients may go home the day of the surgery with their arm in a sling. You may experience post-surgical pain, but most patients with a Catalyst implant start to resume normal, low impact activities the day after surgery, depending on your surgeon's instruction. An exercise program and/or physical therapy will be designed specifically for each patient to help strengthen your shoulder. Removing the sling and driving usually occur in a few weeks, and returning to sports usually in a few months, but it is important to follow your surgeon's guidance.

Although rare, complications can occur during and after a shoulder replacement surgery. To minimize the potential for complications, it is recommended that you discuss with your orthopedic surgeon what activities should take place before and after surgery.

Patient Testimonial



Annette is a 68-year-old female who suffered with advanced arthritis in both shoulders.

- In March of 2016, her right shoulder was replaced with a traditional shoulder arthroplasty system.
- In January 2017, her left shoulder was replaced with a Catalyst CSR system.

All I can say is WOW. My result with Catalyst is so much better. After the right [traditional] shoulder surgery, I slept in a chair for three weeks. This time [with the Catalyst CSR system], on the very first night after surgery, I slept in my bed the whole night. I felt really good and was virtually pain-free.

Three months later, I feel like I haven't even had surgery. I am able to put dishes away on the top shelf and hang clothes without difficulty or pain. I definitely could not do that at this point after my right shoulder surgery.



References

- 1. Data on file at Catalyst OrthoScience
- Budge MD, Orvets N. Stemless total shoulder arthroplasty using a novel multiplanar osteotomy and elliptical humeral head results in both improved early range of motion and radiographic center of rotation compared with standard total shoulder arthroplasty.
 J Shoulder Elbow Surg 2023. 318-325.



To learn more about Catalyst Shoulder Replacement Systems go to:

www.catalystortho.com/patients

Important Note: This brochure is intended only to provide an overview of shoulder replacement surgery. The information herein does not represent or constitute medical advice or recommendations. This information is not meant to replace the specific verbal and written recommendations and instructions provided by your personal physician or surgeon. Individual results and experiences may vary from patient to patient. This brochure should not be used to determine eligibility for shoulder replacement as not all patients are candidates for these products and/or procedures.



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