

## Dr. Cory D. Smith | Orthopedic Surgery & Sports Medicine Shoulder Reconstruction & Arthroplasty Hip, Shoulder, Knee, & Elbow Arthroscopy

# A Patient Education Guide: REVERSE TOTAL SHOULDER ARTHROPLASTY (RTSA)

This is a brief overview of what you, the patient, should know about getting a Reverse Total Shoulder Arthroplasty. If you have any questions, please write them down and bring them to your next consultation so I can go through them with you in detail.

#### WHY DO I NEED A REVERSE TOTAL SHOULDER ARTHROPLASTY?

Arthroplasty is the medical term for the reconstruction or replacement of a joint. There are different types of shoulder arthroplasty procedures. The underlying issue(s) and the extent of the damage to the shoulder joint help determine which type is best suited for you and your goals.

#### **Advanced Shoulder Arthritis**

Arthritis is the progressive destruction of *joint cartilage*. There are different types of arthritis, such as *osteoarthritis* which can be thought of as "wear and tear" of the joint, and *rheumatoid arthritis* which is often caused by medical or autoimmune disease. Normal cartilage covers the ends of bones to create a low-friction environment and cushion at the joint surface which helps maintain pain-free motion. When the cartilage in the shoulder wears down, the space between the *ball-and-socket* joint becomes smaller. Without the cartilage lining, bone on one side of the joint begins to rub on the other side of the joint. This can cause pain, deformity, swelling, and can decrease your range of motion. Patients may also get a sensation of "loose pieces" or "crackling and popping" in the joint. Patients with very advanced osteoarthritis or severe rheumatoid arthritis often require a Reverse Total Shoulder Arthroplasty (RTSA).

Irreparable Rotator Cuff Tear / Rotator Cuff Arthropathy

A *rotator cuff* is a group of four muscles and tendons that hold the shoulder joint in place and allow you to move your arm and shoulder. Rotator cuff tears are sometimes either so large or chronic that they can no longer be repaired.

When the tendons no longer stabilize the *ball-and-socket* joint, it causes friction and deterioration known as *rotator cuff arthropathy*. In older patients with irreparable rotator cuff tears, a Reverse Total Shoulder Arthroplasty (RTSA) is often required.

Rotator Cuff
Supraspinatus
Infraspinatus
Subscapularis
Teres minor

Front view

**Back view** 

#### Fracture

Shoulder fractures can sometimes be fixed with plates and screws. However, if someone has a fracture that is beyond repair, is of advanced age, or has a medical condition that can affect bone healing, a shoulder replacement can be a good option. This will allow for better function and decrease the likelihood of needing multiple surgeries in the future. Age and type of fracture are the most important factors in deciding if a *reverse* replacement is the most suitable.

muscle

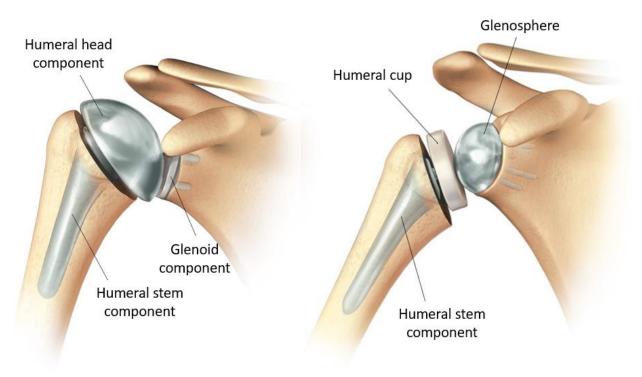
## HOW IS A REVERSE TOTAL SHOULDER ARTHROPLASTY PERFORMED?

This type of shoulder replacement is referred to as a "reverse" because the implant is designed to reverse the position of your original *ball-and-socket* joint. In a Total Shoulder Arthroplasty (TSA), the implant mimics the natural anatomy of the shoulder. Whereas in a Reverse Total Shoulder Arthroplasty (RTSA), the "ball" is placed on the socket side and the "socket" is placed on the ball side.

A reverse arthroplasty allows the shoulder to function without the presence of an intact *rotator cuff.* Instead, the reconstructed joint relies on a major shoulder muscle called the *deltoid* to help move the shoulder.

Generally, the *glenosphere* (artificial ball) is made of metal and is fixed to the glenoid cavity (natural socket) with screws and posts. The *humeral cup* (artificial socket) is made of plastic and is attached to a metal stem (an extension that goes down the arm

bone). This stem can either be cemented into the arm bone or be cement-less. A variety of factors such as age, disease severity, and the possibility of future operations can help determine which type of fixation is best for you.



Total Shoulder Arthroplasty (TSA)

Reverse Total Shoulder Arthroplasty (RTSA)

#### WHAT SHOULD I EXPECT?

### **Before Surgery**

- You may need medical clearance from your medical specialist (primary care doctor, cardiologist, etc.) before surgery.
- Our office will contact you to book your surgical time and location. Typically, outpatient (same day) surgeries are done at an outpatient surgery center convenient to you and inpatient (overnight) procedures are done at Flowers Hospital or Southeast Health.
- You will receive a confirmation call from the hospital the day before surgery telling you what time you should arrive. They will usually go over last-minute details such as hygiene tips, and let you know which medications to bring. It is normal to arrive several hours ahead of your scheduled time to allow for the check-in process.
- Do not eat or drink anything after midnight the night before surgery. You may take sips of water to swallow pills if required and cleared by your medical team. Your surgery may need to be canceled if you do not adhere to these instructions.

## Morning of Surgery

- Arrive at the hospital or surgery center at your instructed time.
- If possible, arrive with a family member or friend who can assist with your check-in and help you remember any last-minute questions. There will be a place for family and friends to wait while you are in surgery. You will require someone to take you home if you are leaving the same day of surgery.
- Dr. Smith will meet with you before you enter the operating room to answer any questions and perform an initial safety check.
- The anesthesia team will meet with you to discuss their anesthesia plan during surgery and be able to answer any questions you may have for them.

#### After Surgery

#### Hospital Stay

- Some patients having shoulder replacements stay overnight and leave the next morning.
- During this time, your nurse and anesthesia team will help to manage your post-operative pain.
   It is important to know that you will have some pain, but the medications should help make your pain manageable.
- You will need someone to take you home.
- A Case Manager can be available to help if you need any other services when you are discharged home.

## Home

- Wear your sling at all times except for bathing and doing your gentle post-operative exercises. These exercises include moving your hand and wrist and coming out of the sling to fully straighten and bend your elbow. You should do this 3-4 times a day.
- You will typically have a waterproof bandage that allows you to shower normally. Confirm this with your nurse before you leave the hospital. Pat it dry after you shower.
- **Do not use your operative arm to carry or lift anything**. Do not use your operative arm to push yourself up from a chair or when getting off the toilet.
- No driving while using your sling and while you are taking your narcotic pain medications.
- Do your best to wean off your narcotic pain medications. Over-the-counter medications such as Tylenol and Ibuprofen can be very helpful.

- Many people are most comfortable sleeping in a more upright position after surgery. You
  can opt to sleep in a recliner or prop yourself up on pillows in bed. You need to wear your
  sling while sleeping.
- If you received an ice machine, please use it as instructed to help reduce swelling. You may also use ice packs or bags. Do not use for longer than directed and always avoid direct skin contact.
- Follow your in-hospital physical therapy instructions carefully if you have been given them. Follow-Up
  - Your first follow-up appointment is usually 10-14 days following surgery.
  - At this visit we will discuss your progress and check your incision. We may take x-rays. We may also remove your sutures/staples at this time.
  - We will determine if you are ready for outpatient physical therapy.
  - If you can start physical therapy, you will be given a referral with the specific instructions both you and your therapist should follow.
  - We will then book your next follow-up visit before you leave, which is typically 4-6 weeks later.

I hope this has helped clarify some of your questions surrounding the Reverse Total Shoulder Arthroplasty (RTSA). You can find additional resources online, including video demonstrations, at www.southernbone.com.

As always, do not hesitate to ask questions and schedule a follow-up appointment should you require any further discussion.

Best,

Cory D. Smith, MD