

## Reverse Total Shoulder Replacement

**Shoulder Anatomy:** The scapula (known as shoulder blade) has a socket called the glenoid. The ball that sits inside this socket is on the top of the arm bone (humerus). With the help of the muscles of the shoulder (the deltoid and rotator cuff muscles), the arm (humerus) moves and rotates within the socket raising and twisting your arm to do everything you need to do with your arm.

**Traditional shoulder replacement:** used for shoulders which have a functioning rotator cuff. In this procedure the humeral head (ball) is replaced by a metal ball, along with a new plastic socket where your glenoid is. In this procedure your arm bone (humerus) remains the ball and the scapular socket (glenoid) remains your socket.

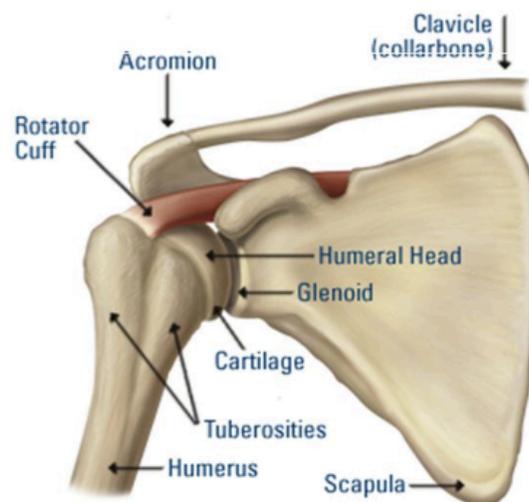
**Reverse shoulder replacement:** This procedure is performed in patients with a severely torn or non-functioning rotator cuff. The socket (glenoid) is replaced by a metal ball that is attached to your own socket (glenoid). The humeral head is replaced by a cup-shaped structure and now becomes your socket.

### **Shoulder Musculature:**

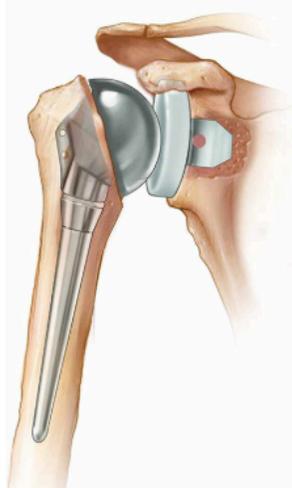
In a healthy shoulder, the rotator cuff muscles help with all movements of the arm. If these muscles are not functioning properly than a person may get a reverse total shoulder in which the deltoid muscle will become the main muscle responsible for many of the movements of the arm.

### **Precautions:**

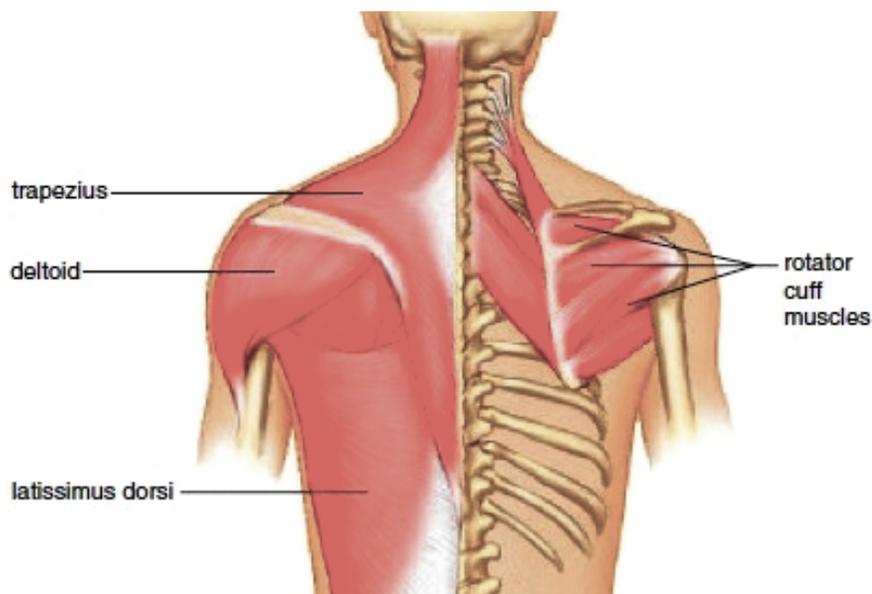
There is a higher risk of shoulder dislocation following a reverse total shoulder arthroplasty. Stability and mobility of the shoulder joint is now dependent upon the deltoid and periscapular musculature. Patients will tend to dislocate when the arm in internal rotation and adduction in conjunction with extension.



Total shoulder arthroplasty



Reverse shoulder arthroplasty



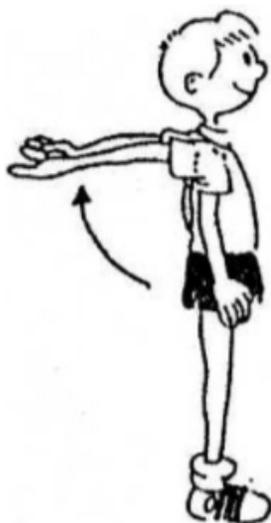
## rTSA Precautions and Activity Timeline:

### 1 – 6 weeks after surgery

**\*\*WEAR SLING AT ALL TIMES, even when you sleep: No active movements of your shoulder NO EXCEPTIONS\*\***

#### Shoulder Dislocation Precautions:

1. No extension past neutral.
2. No combined adduction, internal rotation and extension.



#### **Do not move your arm behind your body.**

- No reaching for a seatbelt.
- Do not sleep w/o a pillow behind your elbow.
- You should always been able to see your surgical side's elbow in front of your body.

#### **Do not move your arm in front and across your body.**

- No tucking in your shirt.
- No bathroom hygiene with surgical arm.
- Do not comb hair, put on deodorant with surgical arm.
- Do not use surgical arm to assist in the kitchen (no stirring, flipping).

#### **Online webpages for more information regarding rTSA:**

1. <https://orthoinfo.aaos.org/en/treatment/reverse-total-shoulder-replacement>
2. <https://www.massgeneral.org/ortho-sports-medicine/assets/dr-price-protocols/reverse-TSA.pdf>

## 6 – 12 weeks after surgery

The sling is no longer needed, but you may still want to wear the sling when you are in large crowds to avoid unintended pushing on shoulder.

### Follow the precautions below:



#### No forceful pulling of your arm.

- Do not walk your dog with surgical arm. No tug-of-war.
- Do not push/pull open heavy doors.

#### No lifting heavy object!

- Do not lift anything heavier than a cup of coffee.
- Do not use this arm to lift when cooking.
- Do not lift shampoo bottle.

#### No putting weight into arm.

- Do not ride your motorcycle.
- Do not push into arm when standing up.
- Do not lean onto arm.

### \*\* Activities you can start doing\*\*

- Light hygiene activities/self-care, brushing teeth, dressing.
- Light cooking, stirring gently, use spatula gently, cutting.
- Picking up glass of water/coffee, plate of food.
- Feed the dog, give dog treats, pick up after dog on walks now using surgical arm.

## 12 - 16 weeks after surgery:

At this point you should be progressing well with regaining your shoulder ROM and you will have started light resistance exercises.

**Activities can GRADUALLY INCREASE with some caution**

**DO NOT PERFORM activities like the ones listed below:**



**NO Lifting objects heavier than 6lbs with surgical arm.**

Gallon of milk: 8.6lbs

Bag of flour: 4.25lbs

12inch pan: 3lbs

Full grocery bag: 3-8lbs

Small bag of dog food: 5lbs

**NO sudden pushing/ pulling movements.**

- No playing tennis, volleyball, basketball etc.
- No walking dog with surgical arm.
- No pushing pulling heavy doors, wagons.

## 16 weeks and beyond after surgery:

### **Lifetime Restrictions:**

- No lifting objects > 25 lbs with surgical arm.
  - o Do not lift heavy suitcases, bags of dog food.
  - o Be cautious when moving heavy furniture.
- No excessive motion up your back.
  - o Do not try scratching upper back with surgical arm.

## Resources

1. <http://www.thecoreinstitute.com/patient-education/Shoulder-Arthroplasty-Patient-Education-11-14-2017.pdf>
2. <https://patienteducation.osumc.edu/Documents/PTforReverseTotalShoulderReplacement.pdf>
3. <https://www.massgeneral.org/ortho-sports-medicine/assets/dr-price-protocols/reverse-TSA.pdf>
4. <https://orthoinfo.aaos.org/en/treatment/reverse-total-shoulder-replacement/>