



Shoulder Replacement: Post-surgical Recovery Process, Expectations, and Timelines

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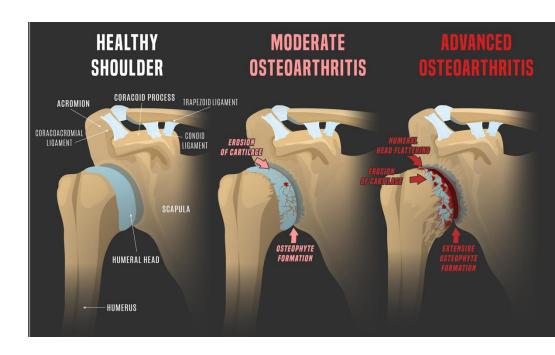
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What is Shoulder Arthritis?

- Loss of cartilage in shoulder joint
 - Firm, smooth surface lining bones of all joints
 - Can wear away over time
 - History of shoulder trauma
 - Genetic predisposition
 - Repetitive/overuse
- What are the symptoms
 - Pain
 - Progressive loss of motion (stiffness)



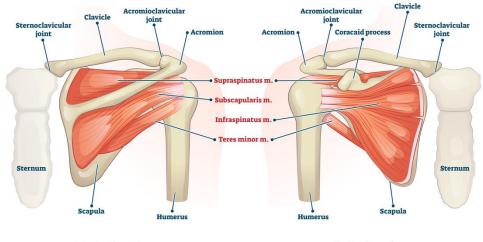
What is the Rotator Cuff?

Group of 4 muscles that surround the shoulder joint

- Front: Subscapularis
- Top: Supraspinatus (most commonly torn)
- Back: Infraspinatus, Teres minor

What does it do?

- Stabilizes the ball-and-socket joint
- Helps to lift and rotate the arm



Posterior view

Anterior view

Primary shoulder osteoarthritis



- Usually has <u>intact rotator cuff</u>
- Physical therapy not always helpful
- Steroid injections may alleviate pain
 - Less relief with subsequent injections
- Anatomic shoulder replacement if patient fails nonsurgical treatment

Rotator cuff tear arthropathy



- Due to chronic rotator cuff tear
- Physical therapy can be helpful
- Often will have pain AND weakness
- Reverse shoulder replacement if patient fails nonsurgical treatment

Indications for Shoulder Replacement

- Primarily performed to improve pain
 - Pain with ADLs
 - Pain interrupting sleep
- Secondary goal of improving shoulder function
- Nonsurgical treatment no longer effective
 - Physical therapy/strengthening
 - Oral anti-inflammatories (Aleve, Advil)
 - Activity modification
 - Steroid (cortisone) injections



How is Surgery Performed?

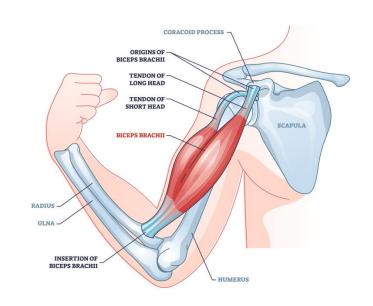
- General anesthesia + nerve block
- 5-inch incision over front of shoulder
- Arthritic head of the humerus (ball) cut using saw, cartilage from socket removed
- Ball and socket replaced with metal and plastic implants
 - Anatomic: Ball replaced with metal ball, socket replaced with plastic socket
 - Reverse: Ball replaced with socket, socket replaced with half-sphere





What about the biceps tendon?

- What is the biceps tendon?
 - Strong, cordlike structure which connects the biceps muscle (upper arm) to top of shoulder socket
- Why do we treat this during shoulder replacement?
 - Common pain generator
 - Runs through shoulder joint
 - Removing it from joint avoids contact with implants
- How do we treat it?
 - Biceps is cut and sewn to the pectoralis tendon



Biceps tendonitis, or inflammation of the long head of the biceps, is a common source of pain in patients with shoulder arthritis or rotator cuff tear arthropathy

Expectations for Day of Surgery

Day of Surgery: At Surgery Center

- Will arrive to surgery center approximately 2 hours prior to surgery
 - Surgery center will call with specific time day before surgery
- Nothing to eat or drink after midnight
- Shower with Hibiclens night before and morning of surgery
- Time at surgery center:
 - Before surgery: Check in, paperwork, IV placement, meet anesthesia team, nerve block (1-2 hours)
 - Surgery: Roll back to operating room, go to sleep, surgery performed, wake up (2 hours)
 - After surgery: Roll to recovery room. Pain will be controlled. Water and crackers administered. Roll to car for family member/friend to take you home.



Day of Surgery: Home

- Ice frequently
 - 15 mins on and 15 mins off
 - Recommend ice machine (purchase on Amazon)
- Sling at all times (will wear sling for 6 weeks)
- · Limit time on feet
- Light diet on day of surgery avoid heavy/greasy foods
- Limit narcotic use do not "stay ahead" of the pain
- Nerve block typically wears off 18-22 hours after administered
 - Pain will increase, and you may require pain medication



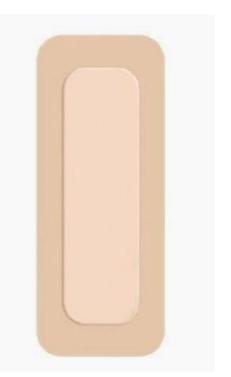
Day after Surgery: Home

- Continue to ice with ice machine
- Resume your regular diet
- Remove sling at least three times daily to maintain elbow range of motion
 - Use nonsurgical arm to help bend elbow (see picture to right)
 - Make sure to fully straighten elbow best to stand up
- May shower the day after surgery
 - Leave waterproof dressings in place until follow-up visit
 - Place Saran wrap/food cling over dressings and discard after shower



Wound Care

- Be very careful in shower
 Most dangerous place after surgery
 - Sling will be off and it is slippory
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 - Keep tan covering (Aquacel) in place until 1-week visit
 - When showering, keep Aquacel covered with Saran wrap/food cling
- Glued on mesh bandage beneath Aquacel will fall over over time
 - · Allow this to fall off on its own
 - Stitches are dissolvable



Leave Aquacel on until 1st postop visit. Keep covered with Saran wrap in shower.



Glued on mesh (Prineo) is below the Aquacel. Allow this to fall off on its own.

Home Exercises:

Start prior to outpatient Physical Therapy. May start these exercises 2 weeks after surgery

Should perform at least 3 times daily, with no limit

Pendulum Exercise ("Stirring the pot")

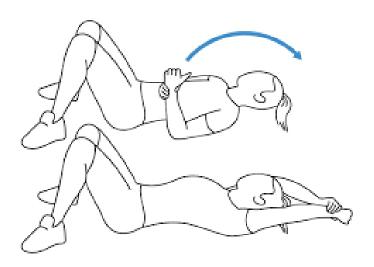
- Remove sling
- Lean over with unaffected hand on table or counter
- Use your hips and legs to gently swing your surgical shoulder in small circles like a pendulum



Start with small circles and slowly enlarge over time

Supine (lying down) Active Assist Forward Flexion

- Remove sling
- Must be performed lying down
- Use unaffected hand to grasp the wrist of the affected side
- Use the unaffected hand to pull the affected arm overhead
 - Stop when a mildly uncomfortable stretch is achieved
 - This should not be painful
 - Expect slow progress each day



Outpatient Physical Therapy Start 2 weeks after Surgery

Note: Rare exceptions are made for small tears and other specific reasons that will be discussed on a caseby-case basis with each patient in which physical therapy is started after 2 weeks postoperative .

Outpatient Physical Therapy

Make sure to call ahead, as they often book out weeks in advance

Goals of Physical Therapy

- 1. Control pain
- 2. Regain full range of motion
- 3. Strengthen rotator cuff and surrounding muscles
- 4. Return to desired activity level

Please discuss goals with Physical Therapist

- 1. Specific job demands (i.e. manual labor job)
- 2. Fitness goals
- 3. Return to sport (competitive/recreational)

Expectations: Symptoms

Time after Surgery	0-2 weeks	2-6 weeks	6 wks-3 months	3-6 months	6 mos - 1 year	
Difficulty sleeping						
Pain at rest						
Pain with shoulder activity				Tapers off		
Shoulder stiffness			Tapers off			
Weakness			Strength restored			
Pain medication needed		Tapers off	NSAIDs/Tylenol only	Minimal	None	

Note: Recovery timelines are general expectations and vary from person to person based on a variety of factors including tear size/retraction, baseline strength and activity level, compliance with postoperative instructions including home exercises and physical therapy, and other health factors.

Expectations: Function

Activity	Immediately	2-6 weeks	6-12 weeks	3-4 months	4-6 months	6+ months
Texting and typing						
Driving						
Desk work (with sling*)		*				
Sleeping in recliner/upright						
Sleeping in bed						
Lifting 1-5 pounds at/above shoulder height						
Lifting 10+ pounds at/above shoulder height						
Basic housework (cleaning)						
Reaching a high shelf						
Light manual labor						
Heavy manual labor						
Sports						

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Additional Considerations

- Females over 50 years old: Take 5000 IU
 Vitamin D (over the counter) once daily for one
 month unless already taking prescription
 Vitamin D or bone density medication (i.e.
 bisphosphonate, Foreto)
- Maximal improvement is not until one year after surgery
 - Steady improvement until 6 months postoperative
 - Slower improvement from 6-12 months
- Early stiffness is protective of the repair
 - Internal rotation (behind back) last to return
 - Do not push aggressively until cleared by MD







Questions?

Contact Brittany Lukaszewski, RN blukaszewski@nch.org