

Guidebook for Shoulders



Guidebook for Shoulders

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Section One: Before Surgery

Welcome!

We are pleased you have chosen Summit Healthcare Regional Medical Center for your shoulder replacement surgery.

The goal of surgery is to:

- Relieve pain
- Restore independence and function
- Return to an active lifestyle

Using the Guidebook

The Guidebook will assist you with:

- What to expect
- What you need to do
- How to care for your new shoulder

Your doctor, nurse, or therapist may add or change any of the recommendations. Always use their recommendations first and ask questions if you are unsure.

Joint Center Overview

We offer a unique program to encourage discharge from the hospital in one to two days after surgery. Program features include:

- Nurses and therapists trained to work with shoulder patients
- Casual clothes
- Private rooms
- Group activities
- Family and friends as “coaches”
- Group lunches
- Care Coordinator who coordinates pre-operative care and discharge planning
- Patient Guidebook
- Quarterly luncheons for former patients and coaches
- Educational seminars about arthritis

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Your Joint Replacement Team

Orthopedic Surgeon - will perform the procedure to repair your damaged joint.

Registered Nurse (RN) - will ensure orders by your doctor are completed.

Physical Therapist (PT) - will assess mobility, balance and stair navigation to regain your independence with mobility.

Occupational Therapist (OT) - will guide you through functional daily activities, such as bathing/dressing and-demonstrate home equipment use, and teach you exercises to regain strength/motion

Care Coordinator will:

- Review at-home needs after surgery.
- Coordinate discharge plan.
- Act as your advocate throughout treatment.
- Answer questions and coordinate hospital care.



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Shoulder Replacement

Healthy Shoulder



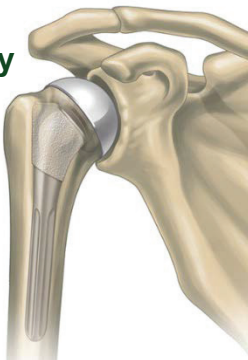
Arthritic Shoulder



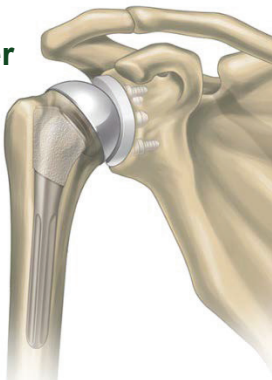
Shoulder Resurfacing



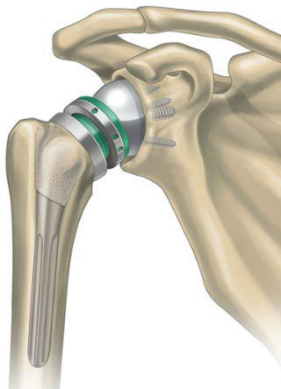
Stemmed Hemiarthroplasty



Total Shoulder Replacement



Reverse Total Shoulder Replacement



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Shoulder Replacement Calendar

Write in the date for your appointments for pre-op labs or tests; pre-op class; and any additional appointments to see your primary care doctor or specialist.

	Monday	Tuesday	Wednesday	Thursday	Friday
6 Weeks Before Surgery					
5 Weeks Before Surgery					
4 Weeks Before Surgery					
3 Weeks Before Surgery					
2 Weeks Before Surgery					
1 Week Before Surgery					

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Get Started - Four to Six Weeks Before Surgery

Plan for Leaving the Hospital

The Care Coordinator will develop a discharge plan that meets your needs. Patients should expect to go directly home to recover in the privacy and comfort of their own surroundings.

Medical Clearance

You will receive a letter from your surgeon requesting pre-operative medical clearance from your primary care provider. Take the letter with you to your doctor to have necessary pre-operative testing completed. This is in addition to seeing your surgeon before surgery. The Care Coordinator may order additional doctor consults after discussing your medical history with the anesthesiologist.

Joint Care Team Call

After surgery has been scheduled, you will be contacted by a member of the Joint Care Team to:

- Verify you have scheduled your pre-operative class and pre-admissions testing appointment at the hospital.
- Act as a liaison for coordination of your pre-operative care.
- Verify you have made an appointment with your primary doctor and have obtained pre-operative tests your surgeon ordered.
- Answer questions and direct you to hospital resources.

Laboratory Tests

Most of your testing will be completed by your primary care provider. There is one blood test called a Type & Screen that must be done at. This will be drawn at your pre-admissions testing appointment. The Care Coordinator may order additional testing.

Medications That Increase Bleeding

Your doctor should tell you when to stop any medications before surgery. For example, discontinue all anti-inflammatory medications such as aspirin, Ibuprofen, Advil, Motrin®, Naproxen, Vitamin E, etc. These medications may increase bleeding. If you are taking a blood thinner, you will need instructions for stopping the medication. The pre-admission testing nurse will instruct you about your other medications.

Importance of Your Coach

Involving a friend or relative as your coach is very important.

Your coach should plan to come with you to attend pre-operative class, visit during your hospital stay, provide support during exercises, and keep you focused on healing.

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Herbal Medicine

Herbal medicines and supplements can interfere with other medicines. Check with your doctor to see if you need to stop taking your herbal medicines before surgery.

Examples of herbal medicines: fish oil, Echinacea, ginkgo, ginseng, ginger, licorice, garlic, valerian, St. John's wort, ephedra, goldenseal, feverfew, saw palmetto, and kava-kava.



Healthcare Decisions

Advance Medical Directives are printed instructions that communicate the patient's wishes regarding healthcare. There are different directives. Consult your attorney concerning the legal implications of each.

- **A Living Will** explains your wishes if you have a terminal condition, irreversible coma, and are unable to communicate.
- **Appointment of a Healthcare Agent** (sometimes called a Medical Power of Attorney) lets you name a person (your agent) to make medical decisions if you become unable to do so.
- **Healthcare Instructions** are your choices regarding use of life-sustaining equipment, hydration, nutrition, and pain medications.

If you have an Advance Medical Directive, bring a copy of the document with you to the hospital.

Stop Smoking¹

Smoking:

- Delays your healing process.
- Reduces the size of blood vessels and decreases the amount of oxygen circulated in your blood.
- Can increase clotting which can cause heart problems.
- Increases blood pressure and heart rate.

Smoking can impair oxygen circulation to your healing shoulder. Oxygen circulation is vital to the healing process.

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If you quit smoking before surgery, you will increase your ability to heal.

When you are ready:

- Decide to quit.
- Choose the date.
- Limit the area where you smoke; don't smoke at home.
- Throw away all cigarettes and ashtrays.
- Don't put yourself in situations where others smoke.
- Reward yourself for each day without cigarettes.
- Remind yourself that this can be done – be positive!
- Take it one day at a time – if you slip, get back to your decision to quit.
- Check with your doctor if you need products like chewing gum, patches, or prescription aids.

*Smoking Threatens Orthopedic Outcomes. Negative effects should prompt orthopedists to address the issue with patients. S. Terry Canale, MD; Frank B. Kelly, MD; and Kaye Daugherty <http://www.aaos.org/news/aaosnow/jun12/cover2.asp>Motrin is a registered trademark of McNeil-PPC, Inc. All rights reserved by trademark owner.

Diabetes Management

If your blood glucose is not kept within a normal target range via diet, exercise, and medication, you are at risk for developing infection at the surgical site, your healing will be delayed, you are at risk for developing a pulmonary embolism, and increased risk for deep venous thrombosis (DVT) or blood clots.

The best way to determine if your diabetes is under control is to perform a blood test call Hemoglobin A1C. This test tells us what your average blood glucose levels have been over the last 3 months. The target range is 7%, which correlates with an estimated average blood glucose level of 170 mg/dl. If the result of your A1C is above 7%, for your safety, your surgery may be delayed until your diabetes is under control.

For more information about diabetes, nutrition counseling, and healthy lifestyles, please consult a diabetes educator and or dietician.

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Start Pre-operative Exercises

Beginning an exercise program before surgery can help make recovery faster and easier. After surgery, you will temporarily be able to use only your non-surgical arm to help you with everyday tasks. We suggest you practice getting out of a chair with one hand, getting into and out of the shower, and using the non-surgical arm to complete activities such as grooming, eating, and going to the bathroom.

It is important to be as flexible and strong as possible before having surgery.

Exercising Before Surgery

Consult your doctor before starting pre-operative exercises. Eight exercises are listed below that your doctor may instruct you to start doing and continue until your surgery. Take 15 to 20 minutes, twice a day to do your exercises. Perform exercises on both arms.



It is also important to strengthen your entire body, not just your arms before surgery. You should perform light endurance activities for your heart and lungs, for example walking for 10 to 15 minutes each day. When you walk, remember to swing your arms naturally. This is helpful and valuable to prepare your shoulder for surgery.

Pre-operative Shoulder Exercises

(Do not do any exercise that is too painful.)

We recommend doing these exercises 4-6 times per day.

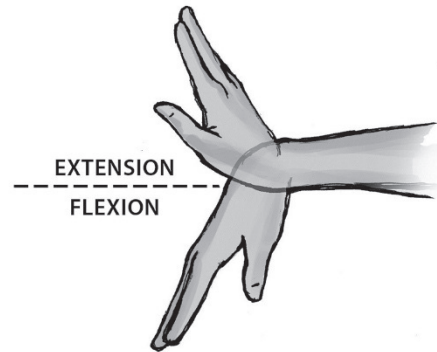
- Hand Pumps
- Grip Squeeze
- Neck Range of Motion
- Scapular Isolation Exercises
- Pendulum Exercises
- Pendulum Circles
- One Arm Row/Pull with Can (Light Weight)
- Ankle Pumps

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1. Hand Pumps

While seated, rest arm on chair or table with the palm of your hand toward the floor. Bend your wrist up and then down.

Perform 30 reps.



2. Grip Squeeze

While seated, rest arm on chair or table. Grip hand size ball firmly, squeeze then release.

Perform 30 reps.



3. Neck Range of Motion

Up and Down Motion:

Sit up straight with your shoulders back and down, keeping your eyes and chin level. Move your head back and up tall as if you were being pulled by a string from the top of your head. Hold for 5 seconds. Slowly bend your head forward, hold for 5 seconds. Return to the starting position.

Perform 10 sets.



Side to Side Motion:

Slowly tilt your head toward one shoulder. Hold 5 seconds. Slowly repeat to the opposite side while keeping your face straight ahead, hold 5 seconds. Return to the starting position.

Perform 10 sets.

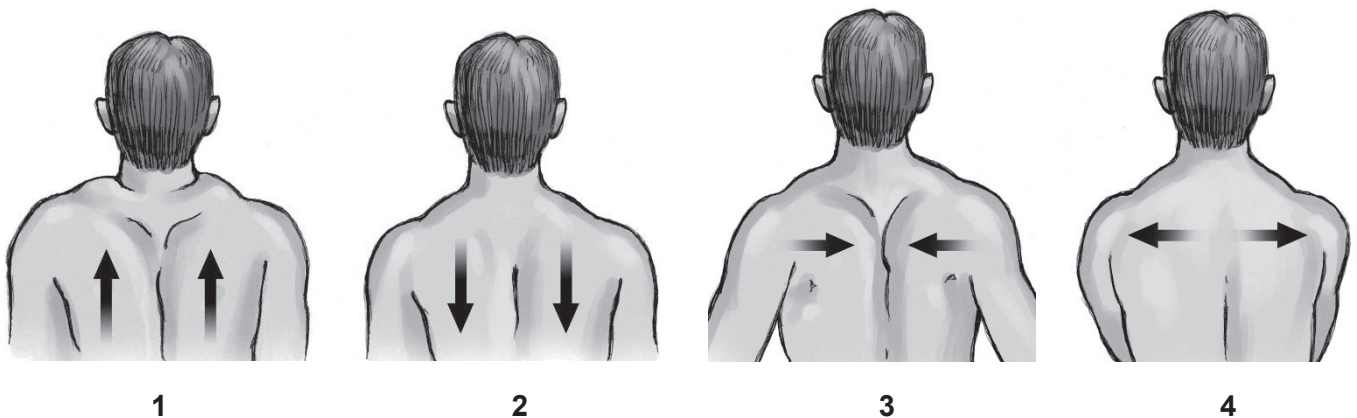


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4. Scapular Isolation

1. **Elevation** - With your arms resting by your side, move your shoulder blades up toward your ears, and then slowly return to the starting position.
2. **Depression** - With your arms resting by your side, move your shoulder blades down, and then slowly return to the starting position.
3. **Retraction** - With your arms resting by your side, squeeze your shoulder blades together, and then slowly return to the starting position.
4. **Protraction** - With your arms resting by your side, move your shoulder blades apart, widening the distance between them and then slowly return to the starting position.

Perform each exercise 10 reps.



5. Pendulum Exercises

While standing, bend 90 degrees at the waist so that you're directly facing the floor, using a table or counter for support. Let your arm dangle straight down. Then rock your body forward and backward and then side-to-side, using body movement to gently swing arm. Keep arm relaxed.

Perform for 2-3 minutes.



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6. Pendulum Circles

While standing, using a table or counter for support, bend at waist 90 degrees with arm hanging parallel to legs. Draw circles in the air with your dangling arm.

Perform for 2-3 minutes.



7. One Arm Row/Pull with Can

While standing and holding on to a sturdy surface, bend forward at the waist, holding a 14 oz. can or light weight. Hang arm parallel to legs, then pull the can up keeping your elbow at your side until you reach a 90 degree angle. Squeeze your shoulder blade toward the opposite side. Then slowly lower your arm back to the starting position.

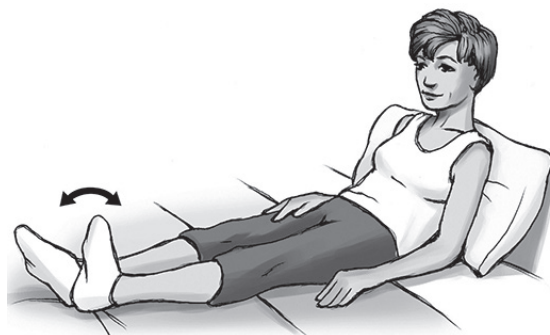
Perform 30 reps.



8. Ankle Pumps

While seated, extend legs, flex, and point your feet.

Perform 30 reps.



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Prepare Your Home

- Put things you use often on a surface that is easy to reach.
- Check railings to make sure they are not loose.
- Complete house cleaning, do laundry, and put it away.
- Put clean linens on the bed.
- Prepare meals and freeze them.
- Cut the grass, tend the garden, and other yard work.
- Pick up throw rugs and tack down loose carpeting.
- Remove electrical cords and other obstructions from walkways.
- Install night lights in bathrooms, bedrooms, and hallways.
- Install grab bars in the shower/bathtub and put adhesive slip strips in the tub.
- Arrange to have someone collect your mail and take care of pets.
- Arrange for someone to drive for you after surgery until you are released to drive by your surgeon.



Breathing Exercises

To prevent problems such as pneumonia, practice breathing exercises using the muscles of your abdomen and chest.

Deep Breathing

- Breathe in through your nose as deep as you can.
- Hold your breath for 5 to 10 seconds.
- Breathe out as if you were blowing on hot soup. Notice your stomach going in. Breathe out for 10 to 20 seconds.
- Take a break and then repeat the exercise 10 times.

Techniques such as deep breathing, coughing, and using an Incentive Spirometer may help prevent respiratory complications after surgery.

Coughing

- Take a slow deep breath. Breathe in through your nose and fill your lungs completely.
- Breathe out through your mouth and concentrate on your chest emptying.
- Repeat.
- Take another breath, but hold your breath and then cough hard. When you cough, focus on emptying your lungs.
- Repeat all steps twice.

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Surgery Timeline

Four Weeks Before Surgery

Start Vitamins, Iron

You may be instructed to take multivitamins, as well as iron. Iron helps build your blood count, which may help prevent the need for a blood transfusion.

Two to Three Weeks Before Surgery

Pre-operative Class

Attend a class for shoulder surgery patients. Bring your coach. If you cannot attend, inform the Care Coordinator .

Class Outline	- Shoulder Disease	- Learn About Assistive Devices and Shoulder Protection
	- What to Expect from Coach/Caregiver	- Discharge Planning/Insurance/Equipment
	- Meet the Joint Replacement Team	- Complete Pre-operative Forms
	- Review Pre-operative Exercises	

Five Days Before Surgery

Begin Mupirocin (Bactroban) Treatment if Ordered

If your nasal swab tested positive for MRSA (Methicillin Resistant Staphylococcus Aureus) or MSSA (Methicillin Sensitive Staphylococcus Aureus), you will be prescribed a course of Mupirocin by your surgeon. This medication is to be use twice daily starting five days prior to your surgery.

Mupirocin (Bactroban) Nasal Ointment Use*:

Some people are carriers or “colonized” with the germ Staphylococcus Aureus. This is a bacteria that lives on the skin and inside nasal cavities. Although a person with this bacteria does not have an active infection, a simple wound or break in the skin could cause the bacterial colonization to evolve into an active infection, jeopardizing the success of your surgery. People with these bacteria can have it for years without actually knowing that they have it. In order to keep you as safe as possible during your joint replacement we will be swabbing you to see if you are a carrier of this bacteria. If the test is positive you will be prescribed a course of Mupirocin ointment to use twice daily for the 5 days leading up to your surgery. This ointment is used to eradicate the bacteria from your nasal passages and prevent it from spreading in your body after surgery.

To apply ointment, place ointment on end of Q tip and apply to inside of both nares, after placing ointment in nose pinch nose repeatedly for about 1 minute to spread ointment around in nose.

*You will be notified by your surgeon if you test positive and need to complete this.

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Four Days Before Surgery

Shower Prep

You will be asked to shower with a special soap once a day for four days before surgery and on the morning of surgery.

1. Pour the special soap on a washcloth.
2. Wash all areas of body except face and peri-anal area.
3. Thoroughly wash the area where you are going to have surgery.
4. Rinse and dress as usual.

Showering:

- In order to cleanse your body of as many bacteria as possible, we ask that you shower with the special Chlorhexidine soap given to you at your preoperative nursing appointment.
- Use this soap to clean from the neck down, avoid getting it on your face or genital areas.
- Shower with Chlorhexidine soap 5 times: once daily for the 4 days prior to your surgery and a final shower on the morning of your surgery.
- **Do not shave your underarm area on the side you will be operated on.** If there are any breaks or irritation in the skin, infection may develop which may result in the need to reschedule your surgery.

Surgery Preparation – Patient Checklist

Fill in date and place a checkmark in boxes as steps are completed. ✓

Date	AM Mupirocin Nasal Ointment	PM Mupirocin Nasal Ointment	Shower with Chlorhexidine Soap
5 Days Before _____			X
4 Days Before _____			
3 Days Before _____			
2 Days Before _____			
1 Day Before _____			
Morning of Surgery	X	X	

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Day Before Surgery

Find Out Your Arrival Time at the Hospital

A nurse from will call you after 3 pm to confirm your surgery time and let you know what time to arrive at the hospital.

Night Before Surgery

It is VERY IMPORTANT that you do not eat or drink anything after midnight, EVEN WATER, unless otherwise instructed. This includes chewing gum, tobacco, and hard candy.

Day of Surgery

You will be asked to come to the hospital 1 ½ - 2 hours before surgery to give staff time to start IVs, prep, and answer questions. It is important you arrive on time as sometimes the surgery is moved up.

Items to Bring to the Hospital

- Personal hygiene items (toothbrush, deodorant, battery-operated razor, etc.)
- Loose fitting shorts or pants with elastic waist
- Button front or zip front tops
- Slide on shoes or shoes with elastic shoelaces; flat shoes or tennis shoes
- Battery-operated items (NO electrical items)
- Shoulder Guidebook
- Copy of Advance Medical Directives (if you have one)
- Insurance card, driver's license, or photo ID
- Co-payment if required by insurance company

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Special Instructions

- Pre-admission testing nurse will inform you which medications, if any, to take on the morning of surgery.
- Leave jewelry, valuables, and large amounts of money at home.
- Remove makeup before procedure.
- Nail polish is okay to remain on.
- No body lotion or deodorant on the day of surgery.

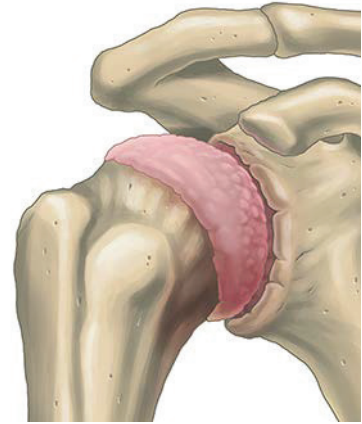


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Frequently Asked Questions (FAQs)

What is osteoarthritis and why does my shoulder hurt?

Osteoarthritis, the most common form of arthritis, is a wear and tear condition that destroys joint cartilage. Joint cartilage is strong, smooth tissue that covers the ends of bones where joints are located. It cushions the bones during movement and because it is smooth and slippery, it allows for motion with minimal friction. Trauma and repetitive movement are reasons why the cartilage wears down exposing the bone ends. Over time, cartilage destruction can result in painful bone-on-bone contact, swelling, and loss of motion.



What is a shoulder replacement?

The term shoulder replacement is misleading. The shoulder is not replaced, but rather an implant is used to re-cap the worn ends of the bone. There are several options for surgical treatment. Your surgeon will choose the right procedure for you.

- **Total Shoulder Replacement** involves replacing the arthritic joint surfaces with a metal ball attached to a stem, and a plastic socket.
- For people who need only the head of the humerus bone replaced, **Stemmed Hemiarthroplasty** is performed.
- With **Resurfacing Hemiarthroplasty**, the joint surfaces are replaced with a cap without a stem, therefore less bone is removed.
- **Reverse Shoulder Replacement** involves switching the socket and metal ball to allow different muscles to move the arm for those who have severe rotator cuff damage.

How long will my new shoulder last and can a second replacement be done?

All implants have a limited life depending on an individual's age, weight, activity level, and medical condition(s). A shoulder implant's longevity will vary in every patient. An implant is a medical device subject to wear that may lead to mechanical failure. There is no guarantee that your implant will last for any specified length of time.

What are the major risks?

Most surgeries go well, without complications. However, infection and blood clots are two serious potential complications. To avoid these complications, you will receive antibiotics and may be prescribed blood thinners depending on your other medical risk factors.

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How long will I be in the hospital?

Most patients will be hospitalized for one to two nights after surgery. Patients are generally discharged to home once they are able to complete activities such as dressing, bathing, toileting, and able to complete their home exercise program.

What if I live alone?

- If possible, it is best to return home and receive help from a relative or friend.
- If needed, you may be eligible to have a home health nurse and physical therapist visit you at home for two or three weeks, or to stay in a sub-acute facility following your hospital stay. The majority of patients do not require a stay in a sub-acute facility. Occupational therapy will let you know if you need this option; requires approval from most insurance companies.



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Section Two:

At the Hospital

Understanding Anesthesia

Anesthesiologists

The Operating Room and Post Anesthesia Care Unit (PACU) at the hospital are staffed by board certified anesthesiologists and certified nurse anesthetists. Your anesthesia will be provided by the anesthesia care team.

Types of Anesthesia

- **General anesthesia** - produces temporary unconsciousness.
- **Regional anesthesia** - involves the injection of a local anesthetic providing numbness, loss of pain, or loss of sensation to the extremity (Interscalene Nerve Block).

Side Effects

Your anesthesiologist will discuss the risks and benefits associated with each anesthetic option, as well as complications or side effects that can occur.

You will be given medications to treat nausea and vomiting which sometimes occurs with the anesthesia. The amount of discomfort you experience will depend on several factors, especially the type of surgery. Your discomfort should be minimal, but do not expect to be totally pain free. Staff will teach you the pain scale to assess your pain level.

Understanding Pain

Pain can be chronic (lasting a long time) or intense (breakthrough) — and pain will change through the recovery process.



Pain Scale

Using a number to rate your pain can help the Joint Care Team understand and help manage it. “0” means no pain and “10” means the worst pain possible. Be sure to communicate with your nurse if your pain is getting worse. It is much easier to control the pain before it gets worse. With good communication, the team can make adjustments to make you more comfortable.

From Wong D.L., Hockenberry-Eaton M., Wilson D., Winkelstein M.L., Schwartz P.: Wong's Essentials of Pediatric Nursing, ed. 6, St. Louis, 2001, p. 1301. Copyrighted by Mosby, Inc. Reprinted by permission.

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Hospital Care - What to Expect

Before Surgery

- Your anesthesiologist will review your information to evaluate your general health and determine the type of anesthesia best suited for you. This includes your medical history, laboratory test results, allergies, and current medications.
- Intravenous (IV) fluids will be started and pre-operative medications may be given.
- Before you receive the anesthesia, monitoring devices will be attached (blood pressure cuff, EKG, and other devices).

During Surgery

- The anesthesia provider will manage vital signs — heart rate and rhythm; blood pressure; body temperature and breathing; as well as monitor your fluid and need for blood replacement if necessary.

After Surgery

- You will be taken to the Post Anesthesia Care Unit (PACU). Your pain level will be assessed, vital signs monitored, and an x-ray of your new shoulder may be taken.
- Depending on the type of anesthesia used, you may experience blurred vision, a dry mouth, and chills.
- You will then be taken to the joint unit.
- Initially, pain is minimal if you had a nerve block. You will be started on scheduled oral pain medication and have IV pain meds available if needed. Remember it is always best to stay ahead of the pain and take medications before the block wears off.
- We recommend that only one or two very close family members or friends visit on surgery day as you will be tired and need your rest.
- At some point on this day, you will be assisted out of bed to walk or sit in a chair. Mobility helps to relieve discomfort. It is important you begin ankle pumps. This will prevent blood clots from forming in your legs.
- Begin using your Incentive Spirometer and doing the deep breathing exercises you learned.

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Hospital Care - What to Expect

Post-op Day One

- Expect to be out of bed, bathed, and dressed in your own clothes before breakfast. Button or zip front tops are best.
- Your surgeon will visit.
- The Physical Therapist will assist you with getting up and walking.
- The Occupational Therapist will help you with range of motion exercises and learn to dress, groom, and manage your sling.
- Pain will be controlled with oral pain medication.
- You will work on independently completing daily activities such as dressing, bathing, and performing your home exercise program.
- You will eat lunch with other patients, nursing staff, and your coach.
- Your coach is encouraged to be present. Visitors are welcome late afternoon or evening.
- Most patients go home this day, your occupational therapist and nurse will let you know if you are doing well enough to go home.

Post-op Day Two

- Expect to be out of bed, bathed, and dressed in your own clothes. Button or zip front shirts are best.
- Day will start with a morning walk.
- You will have therapy; it would be helpful if your coach participates.
- The goal is to discharge you after morning therapy.

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Therapy After Surgery

The stages of recovery after shoulder replacement are typically divided into four phases. While each phase has typical timeframes listed, these should be considered as guidelines. Your surgeon and therapist will guide your individual progress through each phase. ¹

Occupational Therapy Phase I (Hospital Phase of Rehabilitation)

After surgery, you can expect to have your arm immobilized in a sling. The goals will be to control pain, find a comfortable position to rest, and achieve functional independence for daily activities such as dressing and bathing while keeping your shoulder immobilized. You will also learn different range of motion exercises and stretches that you will continue at home. These exercises may vary depending on the reasons you had your surgery and the specific surgical procedure. Your team of therapists and nurses will teach you how to remove and adjust the sling and properly position your arm.

Physical/Occupational Therapy Phase II (Protection and Gentle Movement Weeks 1-6)

At your first follow-up appointment after discharge from the hospital, your surgeon will determine when you will begin outpatient therapy. The ultimate goal of this phase is to protect the healing tissues, control pain, and gradually increase your range of motion while becoming more independent doing daily activities. At first, you will be working on passive range of motion. Passive therapy means the therapist will be moving your arm in prescribed directions to increase mobility. You should not be moving your shoulder on your own. It is important to increase motion before you begin to strengthen your shoulder. Be sure to follow your post-surgical precautions, and wear your sling when you are not performing your exercises. Follow your surgeon's or therapist's instructions.

Physical/Occupational Therapy Phase III (Active Movement Weeks 6-12)

After your surgeon feels you have progressed through Phase II, you will advance to active assisted and then active range of motion exercises. The goal of this phase is to continue the gradual restoration of your shoulder range of motion. With active assisted exercise, you will use a cane/wand to "assist" the arm through a specified range of motion. After mobility and shoulder control improve, you will begin active range of motion exercises. This is moving your arm on your own. This progression is important to return you to previous activities of your choice. Your surgeon, however, may limit your range of motion. It is important to follow these precautions to ensure an optimal outcome. Some common precautions are limited shoulder external rotation, extension, and flexion (greater than 90 degrees). Continue to restrict your lifting; although pain free lifting up to 5 pounds may be allowed towards the end of this phase if you use your elbow and wrist (i.e. bending elbow with minimal shoulder motion to lift a half gallon of milk off of a low shelf).

Guidebook for Shoulders

Physical/Occupational Therapy Phase IV (Strengthening Phase Weeks 12+)

Once you are ready, your surgeon will allow you to participate in full active therapy. The goal of this phase is to gradually restore your shoulder mobility and return you to your normal activities and full independence. During this phase, you will independently perform exercises to help you achieve greater motion and strength. It is important to progress gradually through this stage and limit heavy lifting. Work with your therapist to reach your recovery goals without straining your muscles or developing incorrect movement patterns.

Home Exercise and Self-Care

Your home exercise program will need to continue long after you are discharged from physical and/or occupational therapy. Before you are discharged from outpatient therapy, your therapist will provide you with a plan to help you maintain the progress you have made.



1. REHABILITATION FOR THE POSTSURGICAL ORTHOPEDIC PATIENT, ED 3
By L. Maxey; J. Magnusson
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Discharge Plans

Going Directly Home

- Have someone pick you up.
- Receive discharge instructions concerning medications, PT/OT, activity, etc.
- Take your Shoulder Guidebook with you.
- Patients going home will begin therapy at an outpatient PT/OT facility when directed by your surgeon.
- If Home Health services are needed, the hospital will arrange.

Going to a Sub-acute Rehabilitation Facility

- Someone needs to drive you, or ask the hospital to arrange for transportation.
- Transfer papers will be completed by nursing staff.
- Your medical doctor or an appointed medical doctor from the sub-acute facility will care for you in consultation with your surgeon.
- Sub-acute stays must be approved by your insurance company. In order to transfer to a sub-acute rehabilitation facility, you must meet admission criteria established by the facility in accordance with your insurance company or Medicare.
- If sub-acute rehabilitation is not approved, you may still choose to go there and pay privately or the hospital will make alternate arrangements for home care.
- Sub-acute placement is available at (insert name) or arrangements can be made for you to return to a facility in your home town.

Guidebook for Shoulders

Frequently Asked Questions (FAQs)

What happens during surgery?

Hospital reserves approximately one to two hours for surgery. Time will be taken by operating room staff to prepare you for surgery. You will have general anesthetic or sedation - “being put to sleep.” Most patients also elect to have regional anesthesia or a “block” which numbs the shoulder and arm area for pain control after surgery. The choice is between you, your surgeon, and the anesthesiologist.

Will surgery be painful?

You will have discomfort following surgery, but we keep you comfortable with appropriate medication. Most patients will receive oral pain medication with some additional medication for “breakthrough” pain.

How long and where will my scar be?

Surgical scars will vary in length, but most surgeons make it as small as possible. The incision will be approximately 4-6 inches long and located on the front of your shoulder. There may be lasting numbness around the scar. There are different approaches and techniques that will determine exactly how long and where the incision is made. Your surgeon will discuss this with you.

How long will I need to wear a sling?

Patients should expect to wear a sling for approximately 4 to 6 weeks after surgery. The sling should be worn at all times including while sleeping. The sling may be removed while bathing/dressing and as directed by your therapist during stretching and exercising.

Where will I go after discharge from the hospital?

Most patients are able to go home directly after discharge. The Care Coordinator, PT/OT, and surgeon will help make necessary arrangements if you need more care after your hospital stay.



Guidebook for Shoulders

Section Three:

At Home After Surgery

Caring for Yourself at Home

Things you need to know for safety, recovery, and comfort.

Try not to nap during the day so you will sleep at night.

Be Comfortable

- Take pain medicine at least 30 minutes before physical therapy.
- Wean off prescription medication to non-prescription pain reliever. Take two Extra-strength Tylenol[®] tablets up to four times per day.
- Change position frequently (every 45 minutes – 1 hour) to prevent stiffness.
- Use ice for pain control at least 30 minutes each hour. Use before and after exercise program.

Body Changes

- Appetite may be poor, but your desire for solid food will return.
- Drink plenty of fluids.
- May have difficulty sleeping.
- Energy level will be low. This may last for up to four weeks.
- Pain medication that contains narcotics promotes constipation. Use stool softeners twice daily while taking narcotics, and laxatives if necessary.



Blood Clots

- You may be given a blood thinner to avoid blood clots in your legs.
- If you are on chronic blood thinners you will be restarted on your normal medications after surgery. You may have to take shots for a few days until your oral medication returns to a therapeutic level.

Compression Stockings

You will wear special stockings to compress veins in your legs. This helps to reduce chance of blood clots.

- Wear stockings continuously, removing one to two hours twice a day.
- Notify your doctor if you notice pain or swelling.
- Wear stockings for four weeks after surgery; ask surgeon when you can discontinue.



Guidebook for Shoulders

Incision Care

- Keep incision clean, dry, and covered with the water resistant dressing provided until your follow up with surgeon in 7-14 days.
- No bathtubs, hot tubs, or swimming pools until approved by your surgeon.
- Change dressing only if it becomes soiled or no longer has a good seal (see instructions below).
- Notify surgeon if increased drainage, redness, pain, odor, or heat around the incision.
- Take temperature if feeling warm or sick. Call surgeon if temperature/fever exceeds 100.5 degrees.

Dressing Change Procedure

1. Wash hands.
2. Open new dressing.
3. Remove old bandage.
4. Inspect incision for:
 - increased redness
 - increase in clear drainage
 - yellow/green drainage
 - odor
 - surrounding skin hot to touch
5. Tear half of backing off of the dressing and apply to incision.
6. Be careful not to touch the inside of the bandage that will lie over the incision.
7. Once first half of dressing is applied to incision, slowly pull rest of backing and smooth edges of the dressing as you apply.
8. Firmly rub edges of dressing to assure a good seal.

Guidebook for Shoulders

Recognizing and Preventing Potential Complications

Infection

Signs

- Increased swelling and redness at incision site.
- Change in color, amount, and odor of drainage.
- Increased pain in shoulder area.
- Fever greater than 100.5 degrees.

Prevention

- Take proper care of incision.
- Notify doctor and dentist you have a shoulder replacement.
- Notify dentist, doctor, or surgeon before having dental work or other invasive procedures done; prophylactic antibiotics may be prescribed.

Blood Clots

Surgery may cause the blood to slow and coagulate in veins of legs, creating a blood clot. If a clot occurs, you may need to be admitted to the hospital to receive intravenous blood thinners.

Signs

- Swelling in thigh, calf, or ankle that does not go down with elevation.
- Pain, heat, and tenderness in calf, back of knee, or groin area.
- Blood clots can form in either leg.

Prevention

- Perform ankle pumps.
- Walk several times a day.
- Wear compression stockings.
- Take blood thinners as directed.

Pulmonary Embolism

An unrecognized blood clot could break away from the vein and travel to the lungs. This is an emergency — **CALL 911**.

Signs

- Sudden chest pain.
- Difficult and/or rapid breathing.
- Shortness of breath.
- Sweating.
- Confusion.

Prevention

- Follow guidelines to prevent blood clot in legs.

Guidebook for Shoulders

Post-Hospital Goals

Most patients are discharged from the hospital within one to two days and go directly home. The following are typical goals for each phase of recovery.

Weeks One to Six

Goal is protection of the healing structures by adhering to postsurgical precautions.

- Continue wearing your sling as directed to allow the shoulder tissue to heal.
- Only perform the stretches and exercises provided by your therapists.
- Shower and dress each day.
- Take your pain medication as needed for pain.
- Do your home exercise program 3-5 times per day.
- Ice your shoulder for about 20 minutes several times a day, especially following exercise.
- Remember not to lift anything heavier than a glass of water.
- Take a daily walk.
- Find a comfortable sleeping position.

Weeks Six to 12

Goal is to gain more independence. Follow home exercise program to achieve the best results.

- Achieve 1-6 week goals.
- Continue wearing your sling as directed.
- Follow home exercise plan to increase mobility and begin strengthening.
- Shower and dress.
- Continue to restrict your lifting. Do not lift anything heavier than a glass of water.
- Resume homemaking tasks only if you can maintain your shoulder precautions.
- Do 20 minutes of home exercises three times a day.
- Take a daily walk.
- Begin driving if you have stopped taking prescription pain medication and been approved by your surgeon.

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Weeks 12 Plus

Goal is recovery to resume your daily activities and full independence. The goal of therapy at this point is to improve strength in your operative arm now that it is more stable. Home exercise program is important as you receive less supervised therapy.

- Achieve 1 to 12 week goals.
- Prescribed exercises will increase movement of your shoulder to achieve optimal range of motion.
- Resistance and weight bearing exercises will be introduced.
- Perform home exercise program 3-5 times a day or as directed by your physical/occupational therapist to improve movement, function, and strength.
- Use of the sling is discontinued.

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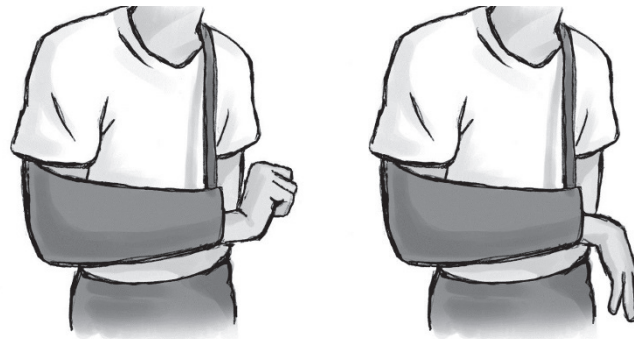
Post-operative Exercises

Exercise is important to achieve the best results from shoulder surgery. Consult your doctor or physical therapist before starting an exercise program. Soon after discharge, you may be referred for exercise from a PT/OT, at an outpatient facility, or participate in a home exercise program. When instructed to do so, perform the following exercises 3-5 times per day. Do not continue exercises if they are extremely painful; contact your therapist or surgeon.

1. Wrist Flexion/Extension

While your shoulder is comfortably and secure in your sling, bend your wrist up and then down.

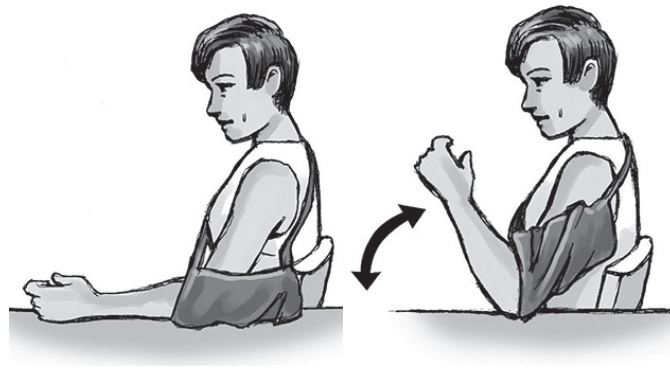
Perform 15 reps.



2. Elbow Flexion/Extension

While seated with elbow supported, bend and straighten your elbow (thumbs up). Or lie on your back and place pillow under your arm. Bend and straighten your elbow.

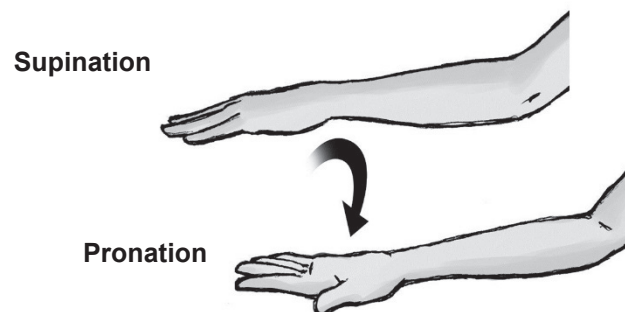
Perform 15 reps.



3. Elbow Supination and Pronation

Rest your arm on a table with a slight bend in your arm. Then rotate your hand to face palm up. Return your palm to face down.

Perform 15 reps.

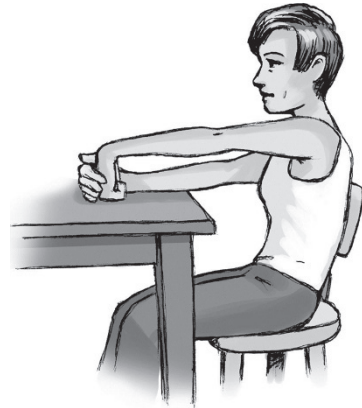


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4. Elbow Extension with Wrist Flexion Stretch

While seated, extend affected arm. With opposite hand, gently push hand down to flex the wrist.

Hold for 5 seconds. Perform 15 reps.



5. Elbow Extension with Wrist Extension Stretch

While seated, extend affected arm. With opposite hand, gently pull fingers towards you as you flex your wrist.

Hold for 5 seconds. Perform 15 reps.



6. Grip Squeeze

While seated, rest arm on chair or table.

Grip hand size ball firmly, squeeze then release.

Perform 15 reps.

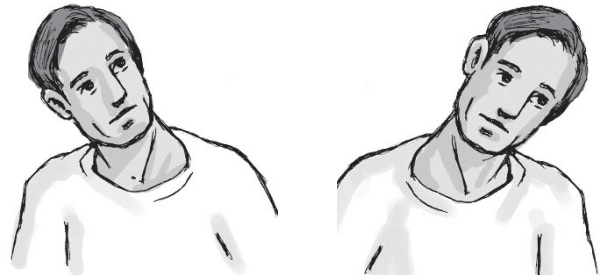


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7. Neck (Active) Range of Motion

Tuck your chin to your chest and hold for 5 seconds.
Tilt head back, looking at ceiling and hold for 5 seconds.
Return to center. Move your head to the right while looking forward and hold for 5 seconds. Repeat to the left.

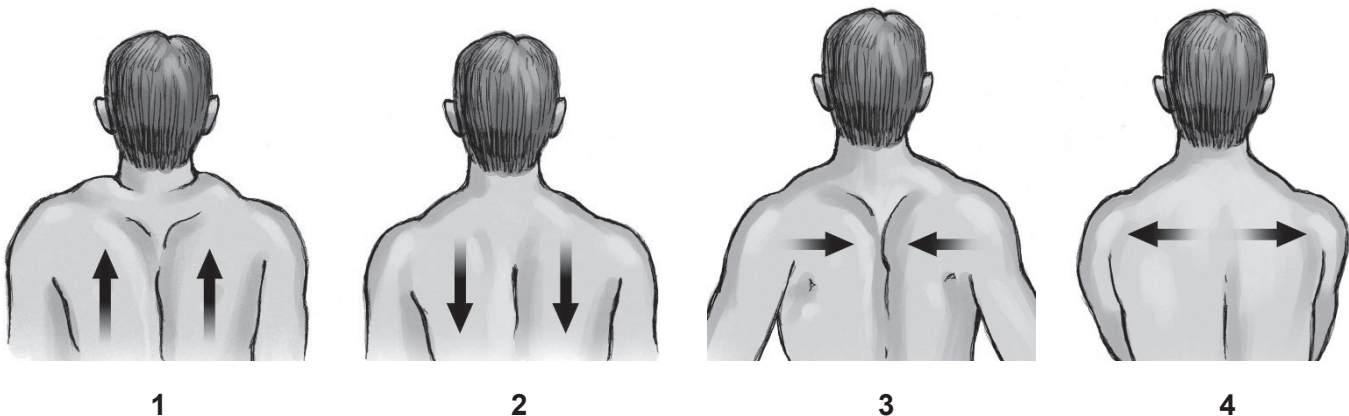
Perform 15 reps in each direction.



8. Scapular Isolation

1. **Elevation** - With your arms resting by your side, move your shoulder blades up toward your ears, and then slowly return to the starting position.
2. **Depression** - With your arms resting by your side, move your shoulder blades down, and then slowly return to the starting position.
3. **Retraction** - With your arms resting by your side, squeeze your shoulder blades together, and then slowly return to the starting position.
4. **Protraction** - With your arms resting by your side, move your shoulder blades apart, widening the distance between them and then slowly return to the starting position.

Perform each exercise 10 reps.

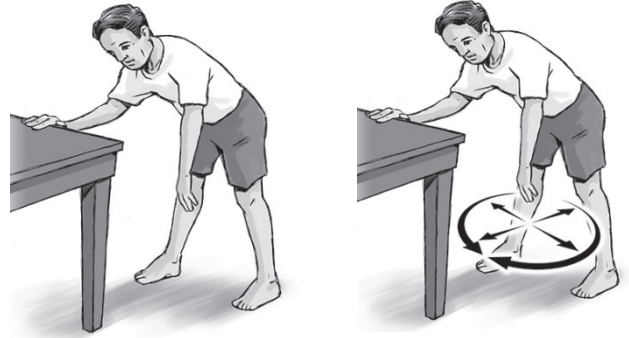


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9. Pendulum Exercises

While standing, bend 90 degrees at the waist so that you're directly facing the floor, using a table or counter for support. Let your arm dangle straight down. Rock your body gently forward and backward and then side-to-side allowing the motion to move your arm drawing circles in the air.

Perform for 2-3 minutes.

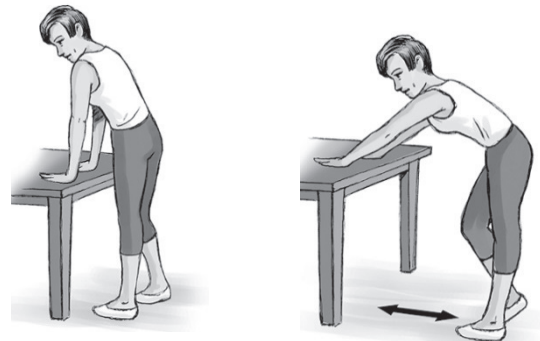


Closed Chain Pendulum Exercise Series

10. Flexion

Standing, place both palms on table. (Put hands on Table and then walk back, do not reach forward to table) Bend forward at the waist and allow your arms to gently extend then return to standing.

Perform 15 reps.



11. Abduction

Standing, place palm of affected arm on table and lean gently away from the affected arm then return to center.

Perform 15 reps.



12. Internal and External Rotation

Standing, place palm of affected arm flat on table and opposite arm by your side. Slowly rotate torso to the left until you feel a gentle stretch. Rotate to the right while keeping palm still. **Perform 15 reps.**

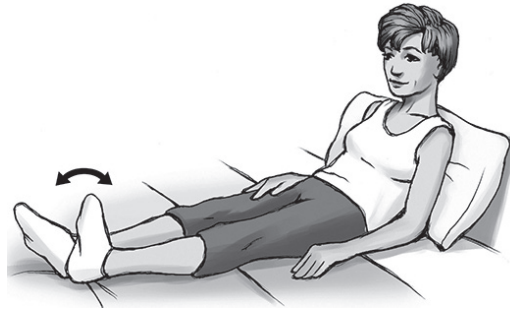


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13. Ankle Pumps

Flex and point your feet.

Perform 20 times.

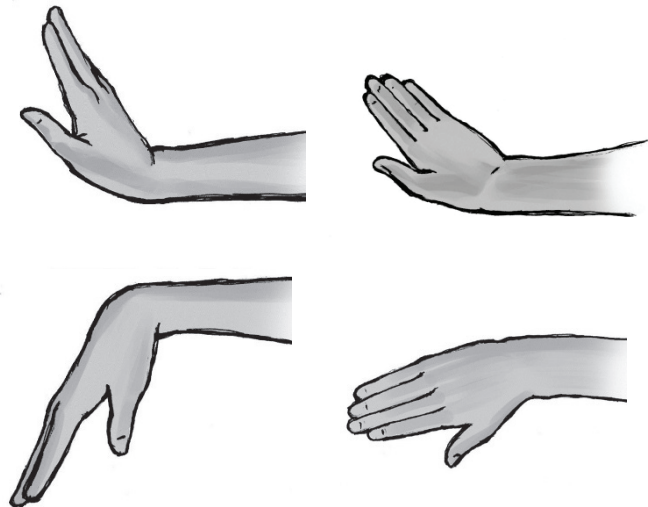


14. Wrist Range of Motion

Bend wrist up towards ceiling, then downward.

While keeping hand flat, bend wrist to the left and right, side to side.

Perform 15 reps.



Shoulder Precautions:

- Sling should be worn initially at all times, even when sleeping, until your doctor tells you to stop.
- Do not use your muscles to hold your shoulder in position, let the sling provide support.
- While lying down, a small pillow or towel roll should be placed behind the elbow to avoid shoulder from falling behind you.
- No lifting of objects heavier than a coffee cup.
- No excessive active or passive shoulder extension (arm motion behind back). Do not move your elbow back past your ribs for 6 weeks.
- No excessive stretching or sudden movements (particularly external rotation).
- No supporting of body weight by hand on involved side.

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Activities of Daily Living

Stand from chair in sling:

Be sure to sit in chair with armrests.

1. Do not lean on your operated arm.
2. Hold the armrest with the unaffected hand.
3. Scoot toward the front of the chair.
4. Only use non-surgical hand to push off armrest while affected arm is immobilized in sling. If a chair doesn't have an armrest, place non-surgical hand on the seat while pushing off. Have someone stand by you for support until you are balanced.
5. Reverse to sit down.



Seated position with sling:

1. Pillows are used to keep proper position of your shoulder and spine, easing strain on your neck.
2. Place pillows under sling, behind the elbow and upper arm.



Bed Transfers - getting into bed:

1. Back up to bed until you feel it on back of legs (need to be midway between foot and head of bed).
2. Reaching back with non-surgical hand, sit down on edge of bed and slowly scoot back toward center of mattress. (Silk pajama bottoms, satin sheets, or sitting on plastic bag may make it easier.)
3. Scoot hips around so you are facing the foot of the bed.
4. Do not use your operative arm to balance or reposition.



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Bed Transfers - getting out of bed:

1. Scoot hips to edge of bed.
2. Sit up while lowering legs to floor using your non-surgical hand.
3. Scoot to edge of bed.
4. Use non-surgical hand to push off bed.
5. Balance before walking.
6. Do not use your operative arm to balance or reposition.

Lying in bed with sling:

1. Lying on your back may be the most comfortable position. Keep a pillow under the operated shoulder to prevent it from falling backwards.
2. Initially, avoid lying on the operative shoulder. Once you are permitted, you may sleep on your non operative side and prop the operated arm on a pillow so it does not fall forward.



Car Transfers:

1. Push car seat all the way back; recline seat back to allow for adequate room to get in and out, but always have it upright for travel.
2. Place plastic bag on seat to help you slide.
3. Back up to car until you feel it touch back of leg.
4. Hold on to immovable object – car seat or dashboard – with your non-surgical arm. Watch your head as you sit down. Slowly lower yourself to car seat.



Guidebook for Shoulders

Getting Dressed

Always dress the operated arm first.

Putting on shirt:

1. From dangle position, put your operated arm into the sleeve first.
2. Do not use your operated arm to assist.
3. Once your arm is in the sleeve, bring the garment around your back and put the other arm in.
4. Do NOT reach behind with the operated arm.
5. Replace sling.



Taking off shirt:

1. Undo the neck strap of the sling.
2. Remove non operated arm from sleeve first.
3. From dangle position, use non operated arm to help remove affected arm from sleeve.
4. Put arm back into sling.

Using sock aid:

1. Slide sock onto sock aid.
2. Hold cord with non-surgical hand and drop sock aid in front of foot. Easier to do if knee is bent.
3. Slip foot into sock aid.
4. Straighten knee, point toe, and pull sock on with non-surgical hand. Keep pulling until sock aid pulls out.



Using long-handled shoehorn:

1. While seated, with non-surgical hand, use reacher, dressing stick, or long-handled shoehorn to slide shoe in front of foot.
2. Place shoehorn inside shoe against back of heel.
3. Step down into shoe, sliding heel down shoehorn.



Guidebook for Shoulders

Around the House: Saving Energy and Protecting Your Joints

Kitchen

- Keep sling on while performing chores and do not use operated arm.
- Packaging that can be opened easily, with one hand would be best.
- For the first several weeks, you may only use your non-surgical side to feed yourself.
- Remember DO NOT lift anything heavier than a cup of coffee or glass of water.
- Plan ahead! Gather all cooking supplies at one time. Sit to prepare meal.
- Place frequently-used cooking supplies and utensils where they can be reached without much bending or stretching.
- To provide better working height, use a high stool or put cushions on a chair when preparing meals.



Bathroom

Remember NO reaching, pushing, or pulling with your operated arm. You may perform light cleaning with one hand only. Keep arm in sling while doing any light chores.

Safety Tips and Avoiding Falls

- Your arm swing actually adds balance while walking. You may feel slightly off balance with your arm in a sling. A physical therapist may suggest you use a cane initially if you are at all unsteady while walking.
- Pick up throw rugs and tack down loose carpeting. Cover slippery surfaces with carpets that are firmly anchored to the floor or have non-skid backs.
- Be aware of floor hazards such as pets, small objects, or uneven surfaces.
- Provide good lighting throughout. Install nightlights in bathrooms, bedrooms, and hallways.
- Keep extension cords and telephone cords out of pathways. Do NOT run wires under rugs — this is a fire hazard.
- Sit in chairs with arms to make it easier to get up.
- Rise slowly from either sitting or lying position to avoid getting light-headed.
- Do not lift heavy objects for first three months and then only with surgeon's permission.

Guidebook for Shoulders

Dos and Don'ts for Rest of Your Life

What to Do

- Notify your dentist or other doctor/surgeon in advance if you are having dental work or other invasive procedures. Generally, antibiotics are taken prior to procedure.
- Although risks are low for post-operative infections, a risk remains. A prosthetic shoulder could possibly attract bacteria from an infection located in another part of your body.
- If you develop a fever of more than 100.5 degrees or sustain an injury such as a deep cut or puncture wound, you should clean it as best you can, put a dressing or adhesive bandage on it, and notify your doctor. The closer the injury is to your prosthesis, the greater the concern. Occasionally, antibiotics may be needed. Superficial scratches may be treated with topical antibiotic ointment. Notify your doctor if area is painful or reddened.
- When traveling, stop and change positions hourly to prevent your shoulder from tightening.

Exercise

With permission from your orthopedic surgeon and primary care doctor, you should be on a regular exercise program three to four times per week, lasting 20 to 30 minutes.

- Inappropriate activity with your shoulder may cause damage. Always review exercises with your surgeon before starting.
- Walking regularly is an excellent way to stay active as your shoulder is healing.

Exercise – Do

- Choose low impact activity.
- Recommended exercise classes.
- Home program outlined in Guidebook.
- Regular one- to three-mile walks.
- Treadmill (for walking).
- Stationary bike.
- Aquatic exercises.
- Regular exercise at fitness center.
- Low-impact sports such as golf, bowling, gardening, dancing, swimming, etc.
- Consult surgeon or physical therapist about specific sport activities.



Exercise – Don't

- Do not run or engage in high-impact or jarring activities.
- Do not participate in high-risk activities such as contact sports.
- No heavy or repetitive shoulder lifting.
- Do not take up sports requiring strength/agility unless approved by your surgeon, PT/OT.



Guidebook for Shoulders

Recommended Exercise Classes

Classes

Check with your physical or occupational therapist regarding what classes they offer or recommend within your community.

Aquatic

Participants are led by certified aquatic fitness professionals through a series of designed exercises that, with the aid of the water's buoyancy and resistance, can improve shoulder flexibility and muscular strength. Warm water and gentle movements can help relieve pain and stiffness. Your doctor's permission is required.

*You need a regular
exercise program to
maintain the fitness
and health of muscles
around your shoulders.*

Guidebook for Shoulders

Importance of Lifetime Follow-up Visits

When should you follow-up with your surgeon?

- Every year, unless instructed differently.
- Anytime you have mild pain for more than a week.
- Anytime you have moderate or severe pain.

There are reasons for routine follow-up visits with your orthopedic surgeon.

If you have a cemented shoulder, the integrity of cement needs to be evaluated. With time and stress, cement may crack. A crack in cement does not necessarily mean you need another surgery, but it means things need to be followed more closely.

Your shoulder could become loose and this might lead to pain. Alternatively, the cracked cement could cause a reaction in the bone called osteolysis which may cause the bone to thin out and cause loosening.

Second reason for follow-up is the plastic liner in your shoulder may wear. Tiny wear particles combine with white blood cells and may get in the bone and cause osteolysis (similar to what can happen with cement).

X-rays taken at follow-up visits can detect problems. New x-rays can be compared with previous films to make these determinations. This will be done in your doctor's office.

If you are unsure how long it has been or when your next visit should be scheduled, call your doctor.



Guidebook for Shoulders

Frequently Asked Questions (FAQs)

Will I need help at home?

For the first few days or weeks, depending on your progress, you will need someone to assist you with meal preparation, etc. If you go directly home from the hospital, the Care Coordinator or social worker will assess your needs. Family or friends need to be available to help. Preparing ahead before surgery can minimize amount of help needed. Having laundry done, house cleaned, yard work completed, clean linens, and single portion frozen meals will reduce the need for help.

Will I need physical therapy when I go home?

Yes, you will have either outpatient or in-home therapy. Patients are encouraged to utilize outpatient therapy. Your Orthopedic Care Manager will help arrange for these appointments. If you need home therapy we will arrange for a therapist in your home. Following this, you may go to an outpatient facility several times a week to assist in your rehabilitation. Length of time for this type of therapy varies with each patient.

Will my new shoulder set off security sensors when traveling?



Your shoulder replacement is made of metal alloy and may or may not be detected when going through some security devices. Inform the security agent you have a metal implant. The agent will direct you on security screening procedure.

Guidebook for Shoulders

Section Four:

Appendix

Glossary

- **Active Range of Motion:** Movement through available range of identified plane of motion without assistance.
- **Abdomen:** Part of body commonly thought of as the stomach; it's situated between hips and ribs.
- **Ambulating:** Walking.
- **Assistive Devices:** Walker, crutches, cane, or other device to help you walk.
- **Assisted Range of Motion:** Movement of arm through available range of identified plane with assistance of person, cane, or wand.
- **Compression Stockings:** Special stockings that encourage circulation.
- **Dorsiflexion:** Bending back foot or toes.
- **Dressings:** Bandages.
- **Embolus:** Blood clot that becomes lodged in a blood vessel and blocks it.
- **Extension:** Moving arm straight back behind body with elbow straight
- **External Rotation:** Moving arm in rotation position (i.e., hand behind head).
- **Flexion:** Moving arm in front of the body.
- **Incentive Spirometer:** Breathing tool to help exercise lungs.
- **Incision:** Wound from surgery.
- **IV:** Intravenous.
- **Osteolysis:** Condition in which bone thins and breaks down.
- **OT:** Occupational therapy.
- **PT:** Physical therapy.
- **Precaution:** Rule to promote optimal outcome.
- **Sling:** Device that holds arm in position for healing.