

A Guide to Your Shoulder Replacement Surgery

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Anatomic Replacement



Reverse Replacement



To our patients,

Thank you for the opportunity to take part in your care. Our number one goal is to improve your quality of life through our knowledge, skill, experience, and most importantly – compassionate care. Shoulder replacement surgery is a highly effective procedure, but we recognize surgery can be stressful. We hope to make this process as smooth as possible.

This binder is intended to be a resource to help you and your loved ones understand shoulder replacement, the risks, and benefits of surgery, and what to expect during your surgical and postoperative experience. Please keep this with you all the way up to your date of surgery and beyond.

Our team is highly committed to improving patient outcomes and satisfaction and we kindly ask that you complete our patient-reported outcome questionnaires before each of your appointments. The questionnaires will ask you about your pain, shoulder function, general health, and satisfaction with your care. We rely on your responses to get a better understanding of how patients are doing and identify ways to improve the experience and outcomes for future patients.

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Understanding Shoulder Replacement Surgery

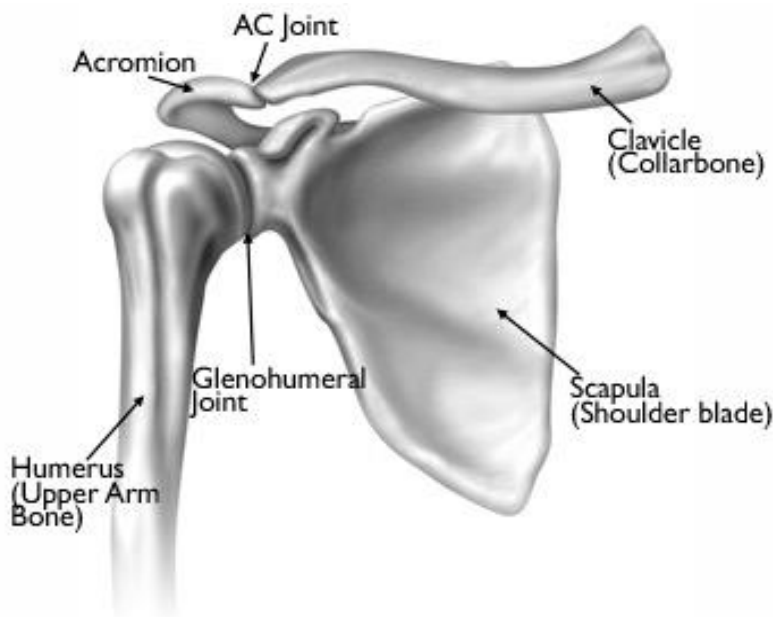
Shoulder replacement surgery has been recommended for the treatment of your shoulder problem. This operation is usually performed for arthritis or fractures of the shoulder, but other conditions involving the shoulder can also be successfully treated with shoulder replacement surgery.

The purpose of this information packet is to give you information about the surgery, as well as answer the most common questions patients typically ask. This handout provides information on your surgery, your hospital stay, as well as your return home.

Additionally, a video about total shoulder replacement surgery can be found at www.stapletonortho.com under the *Patient Resources*.

THE NORMAL SHOULDER

The normal shoulder is very complex and involves three bones and more than one joint. These bones are the clavicle (collar bone), the scapula (shoulder blade), and the humerus (upper arm bone). The upper end of the arm bone (humerus) and the outside edge of the scapula bone (glenoid) form a “ball-and-socket joint.” There are numerous muscles, ligaments and tendons which help to provide stability and movement. This joint is remarkable because it typically allows greater range of motion than any other joint in your body.



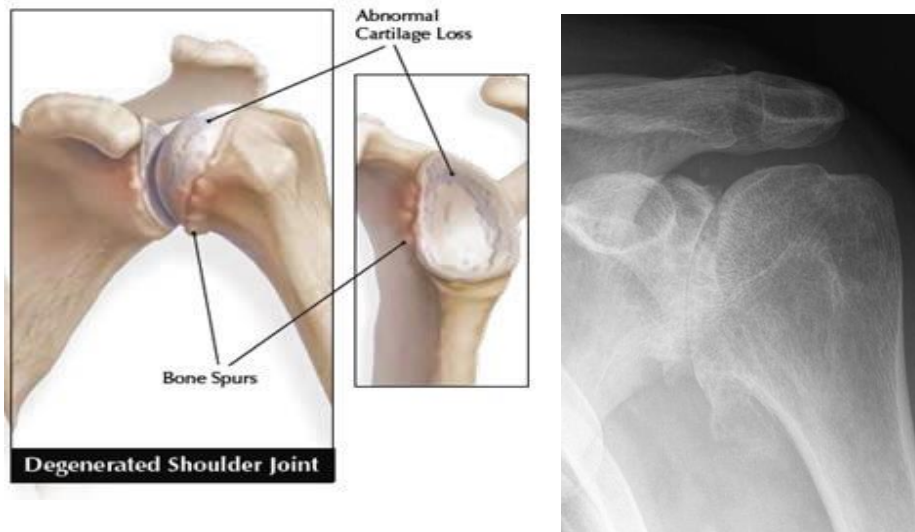
TYPES OF SHOULDER REPLACEMENTS

There are two types of replacements. The anatomic total shoulder preserves the anatomy of your shoulder. A metal ball replaces the end of the upper arm bone (humerus) and a plastic cup replaces the socket (glenoid). The rotator cuff is left intact. A reverse shoulder replacement reverses the implants and a metal ball replaces the glenoid and a plastic cup replaces the end of the humerus.

There are multiple factors that determine which implant is best suited for you. Some of the factors are your age, activity level, body type, strength of your bone, and quality of soft tissue and your rotator cuff tendons.

WHO NEEDS TOTAL SHOULDER REPLACEMENT SURGERY?

Total shoulder replacement surgery is suggested if there is degeneration of the ball-and-socket joint. When the smooth surfaces (cartilage) of the ball and socket become rough, they rub against each other rather than glide. This rubbing causes pain, stiffness and swelling. Most patients who decide to have shoulder replacement surgery have experienced shoulder pain for a long time. Many patients have developed pain that limits their daily activities and may interfere with their ability to sleep. Shoulder stiffness may also interfere with the use of their arm for everyday activities. A shoulder replacement is performed to alleviate shoulder pain and improve range of motion of your shoulder joint.



ANATOMIC TOTAL SHOULDER REPLACEMENT

Joint replacement surgery replaces the ends of damaged bones in a joint. The shoulder joint allows you to move the upper arm in multiple directions and it is where the end of the upper arm bone (humerus) meets the end of the scapula bone (glenoid). In the shoulder joint, the end of the humerus is shaped like a ball and the glenoid is shaped like a shallow cup. During total shoulder replacement surgery, the damaged part of your shoulder is removed and

replaced with an implant. Implants are made of various materials: stainless steel, titanium, cobalt-chrome, and polyethylene (surgical-grade plastic). Bone cement may also be used in the replacement.



The most common reason for a total shoulder replacement:

Severe degenerative joint disease (osteoarthritis) - The cartilage has worn away resulting in bone-on-bone contact. When the smooth surfaces of the head of the humerus (ball) and glenoid (socket) become rough, they rub against each other rather than glide.

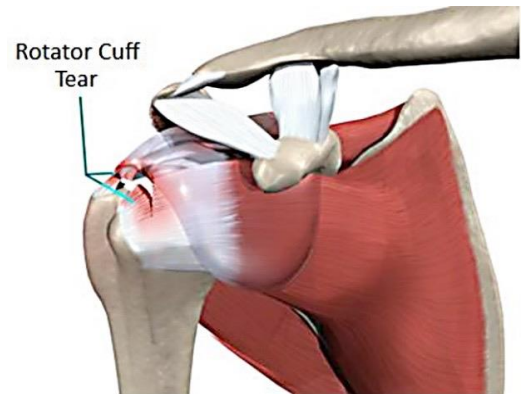
REVERSE SHOULDER REPLACEMENT

Reverse total shoulder replacement surgery is an option when the rotator cuff muscles surrounding the shoulder are not functioning properly, usually due to a chronic tear in one or more of the tendons that is not able to be surgically repaired. This can also lead to degeneration of the ball-and-socket joint resulting in arthritis. Combined, a disorder called Rotator Cuff Arthropathy, can lead to chronic pain and shoulder dysfunction. Reverse shoulder replacement surgery is designed to alleviate most of the shoulder pain and restore function. It often helps to improve the range of motion of your shoulder joint. For a reverse shoulder replacement procedure, most of the surgery will follow the same steps as the conventional total shoulder. However, the components of the reverse are shaped differently. The glenoid (socket) component is shaped like a ball called the glenosphere. This is fixed to the scapula with screws. The humeral (arm) component is now the socket that attaches to the upper end of the humerus.



Common reasons for reverse shoulder replacement surgery are:

- Chronic tear of the rotator cuff tendon(s)
- Rotator Cuff Arthropathy (chronic rotator cuff tear with associated arthritis)
- Worn glenoid (socket)



Other reasons for reverse shoulder replacement surgery:

- Complicated proximal humerus fractures
- Poor healing (mal-union, non-union) of proximal humerus fractures previously repaired
- Worn torn or thin rotator cuff for patients with osteoarthritis

Longevity of Shoulder Replacement

Shoulder replacement surgery is one of the most reliable and predictable operations for improving pain, function, and overall quality of life. Patients considering shoulder replacement commonly ask about how long their replacement will last. There are several factors that influence the longevity of a shoulder replacement, some of which are patient specific while others pertain to the type of shoulder replacement (anatomic total shoulder vs. reverse shoulder replacement). We will have a personalized discussion with you regarding your individual risk and anticipated likelihood of long-term success with a shoulder replacement.

It is important to understand that any long-term information pertaining to the longevity of shoulder replacement surgery is based on surgical techniques and implants that are over 10-20 years old. While we believe that current technology and surgical techniques will improve the survivorship of modern shoulder replacements, long-term follow-up will be needed to know for sure. In general, data from the Mayo Clinic indicates that the likelihood of not requiring a revision surgery after an anatomic total shoulder replacement is approximately 90% at 10 years and 80% at 20 years.^{3, 4} Patients who receive a reverse shoulder replacement appear to have slightly better implant longevity, with several studies reporting >90% survivorship at a minimum of 10 years.^{1, 2} Longer term follow-up after reverse shoulder replacement is limited as this is a relatively newer type of replacement. Recent data from the Australian Orthopaedic National Joint Registry with over 40,000 shoulder replacements demonstrated that at 10 years, 12.4% of patients required a revision surgery after an anatomic total shoulder replacement compared to 6.6% of patients after a reverse shoulder replacement.⁵

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 5. <https://aoanjrr.sahmri.com/annual-reports-2019>

PREPARING FOR YOUR TOTAL SHOULDER REPLACEMENT

The following information is addressed in this packet. Any questions or concerns should be discussed between you and the team in preparation for your surgery. Much of this information can also be found in the video mentioned above.

- Preoperative education about the surgical procedure
- Surgical risks
- Preparation for surgery
- What to bring to the hospital
- Discharge planning
- Home preparation for after surgery

PRE-OPERATIVE TESTING APPOINTMENT

Your Pre-operative testing appointment at Greenbrier Valley Medical Center will be made roughly 2 weeks ahead of your surgical date. This appointment should be within 30 days of your scheduled surgery date.

Greenbrier Valley Medical Center will provide you with the information and perform any tests that may be required to have prior to surgery. The following are discussed with you at your pre-screening appointment:

- Medications
 - Please bring a list of your medications to your pre-operative visit.
- Blood/Urine tests
- Medical clearance from your doctors
 - You may have additional appointments with a specialist (cardiologist, hematologist) depending on your medical history.
- Pre-operative infection prevention

It is important to continue taking all your other prescribed medication until your pre-admission testing office visit. During this visit, you will be given specific instructions about all of your prescription medication(s).

PREPARING YOUR HOME FOR AFTER SURGERY

- Move frequently used items, especially in the kitchen, bathroom, and bedroom, to easy-to-reach drawers and/or shelves.
- Make sure all your medications are within easy reach.
- Have a cell phone or cordless phone close to you.
- Place a list of emergency phone numbers by the phone.
- Shampoo and soap containers with pump tops are much easier to use than pop open tops.
- Stock your freezer with easy to reheat meals and stock up on non-perishables which are pre-cut as using a knife is not easy immediately after surgery. You will need to drink a lot of water and eat plenty of health foods and snacks.
- If possible, arrange assistance with laundry and cleaning.
- Clear pathways between your most commonly used areas -- such as from your bedroom to your bathroom and kitchen, and between the living room, bedroom, and bathroom.
- Remove all clutter and keep stairs free of objects.
- Install night lights between bedroom and bathroom
- Make arrangements to keep pets in another area of the house when you first get home. They can be an unintentional hazard.

CLOTHING FOR AFTER SURGERY

- Loose fitting clothing is recommended after surgery.
- You may want to get a couple pairs of pants that have elastic waists.
- Many patients prefer bras that fasten in the front.
- You will want to be sure to have a pair of slip on shoes. Do not wear flip flops as it is too easy to trip.

COLD THERAPY MACHINE

A Cold Therapy Machine to use following your surgery is highly recommended, as it seems to make recovery less painful and reduces swelling. Unfortunately, insurance does not cover these machines. You can search online using “Cold Therapy Unit” and will find some options. This is not a requirement for surgery, but can be an easier alternative to making ice packs after your procedure and seems to be more effective.

DIET

Healthy eating **before** surgery helps you heal and recover **after** surgery. Good nutrition is necessary for healing. During the healing process, the body needs increased amounts of calories, protein, vitamins A and C, and sometimes the mineral zinc. The following guidelines will help you choose "power" foods to promote healing. Eat a variety of foods to get all the calories, proteins, vitamins, and minerals you need. If you have been given a special diet, follow it as much as possible. It will help promote wound healing and may prevent infection and some complications.

Iron-rich foods

Eat iron-rich foods prior to surgery. Iron combines with protein to make hemoglobin, the substance that carries oxygen in the blood to all parts of your body. When hemoglobin is low, weakness and fatigue may result causing a slower recovery.

Foods that contain a high amount of iron include:

- Lean red meat/ liver
- Enriched bread, pasta, fortified cereals
- Dried beans and peas
- Dried apricots and raisins
- Green leafy vegetables. NOTE: Patients on coumadin should talk with their physician

Vitamin C

Eating foods high in vitamin C along with iron-rich food will help your body absorb the iron. Foods that are high in vitamin C include:

- oranges and orange juice
- cantaloupe
- tomatoes
- potatoes

Eating in the days leading up to surgery

Eat only light meals, especially the day before surgery. The combined effects of anesthesia and your medication may slow down your bowel function. This can cause constipation after surgery. Increase fluids and fiber in your diet as well.

Practice Using a Sling

We suggest practicing daily activities or household duties using one arm or while wearing a sling for a few weeks prior to surgery. This will help you adapt and prepare for after surgery.

Preparing For Your Surgery

THE NIGHT BEFORE SURGERY

- Remember that you are to have nothing to eat or drink after midnight the night before surgery. Do not eat or drink anything including: gum, mints, or candy, and water or black coffee.
- If you are experiencing any signs of infection such as fever, cold/flu symptoms, diarrhea, skin rash, or open sores, please call the team and your medical doctor as soon as possible.
- Try to get a good night sleep. It is important to be well rested before surgery.
- Bathe or shower the night before or the morning of your surgery.
- All nail polish should be removed before your arrival for surgery. Your fingers will be used to accurately monitor your oxygen level during surgery.
- Creams and lotions should not be worn on the day of surgery. A light application of deodorant is allowed.

You will be admitted to the hospital on the morning of your surgery. You are typically asked to arrive about two hours prior to your actual surgery time. **Greenbrier Valley Medical Center will contact you the day prior to your surgery between 12-4 pm with an exact time to arrive at the hospital registration area on the day of surgery.** Please make every effort to arrive on time.

Most patients are discharged the day after surgery, though some patients are able to go home the day of surgery. Patients are typically discharged to their home without the need for a rehab facility. It is important to prepare your home for discharge after surgery (see Preparing Your Home for Surgery section). A case manager will be assigned to you the day of surgery and he or she will determine if you would benefit from going to a rehab facility instead of straight home. This process will also be initiated at your pre-operative appointment.

What to Pack for an Overnight Stay

Pack a bag or small suitcase with only the items you may need during your hospital stay. Please bring your own toiletries and any necessary personal items. While in the hospital you may opt to wear the hospital gown or you may bring your own clothes from home. Please review the following about what to and what not to bring with you.

WHAT TO BRING TO THE HOSPITAL

- This Total Shoulder Replacement Guide.
- A full set of comfortable clothing. The clothing should be loose-fitting to allow room for any post-operative swelling.
- Shoes with non-skid soles.
- Personal items: contact lenses/denture care materials, glasses, hearing aids.
- CPAP/BIPAP machine (if routinely used). If you require a CPAP/BIPAP, you must stay overnight at the hospital for monitoring.
- A form of photo ID and insurance cards to present to the registration and admitting department.
- Cold Therapy Unit, if purchased ahead of time.

WHAT NOT TO BRING TO THE HOSPITAL

- Money, jewelry, or other valuables.
- Medication - unless instructed by your surgeon/pre-operative nurse.
- Cigarettes, electric cigarettes, or tobacco.

Bring this Total Shoulder Replacement Binder with You on the
Day of Your Surgery

Your Surgery Day

When You Arrive at The Hospital

The day of surgery you will check in and proceed to the pre-operative area where you will change into a hospital gown. You will be asked to confirm your name, date of birth, your surgeon's name, and the procedure for which you are scheduled. Before your surgery, several different people who are in charge of your care will ask you to repeat this information. Do not be alarmed, this is a routine safety measure. The nurse in the surgery area will take your vital signs, start an IV, and review your medical history.

You will also meet with the anesthesiologist. Anesthesiologists are physicians who administer the medication to make you fall asleep and provide pain management during and following the surgery. During surgery, anesthesiologists choose from a variety of medications for their different functions such as relieving pain, making the patient unconscious, and relaxing the body's muscles. To do this they may administer inhalation (gas) anesthetic agents, sedatives, muscle relaxants, and other medications. The anesthesiologist balances all of these medications in accordance with medical and surgical needs of each patient.

The most common method of providing anesthesia during shoulder replacement is general anesthesia. With this, you are unconscious and have no awareness of the surgical procedure or any sensations. A tube is placed into the airway into your lungs. In addition to this, it is common to have a regional nerve block administered either before surgery or right after surgery. This will be discussed with you further by the anesthesiologist.

It is important to inform your anesthesiologist in the pre-operative area of any allergies or medications that have caused you problems in the past. It is also important to discuss any problems you may have had in the past with anesthesia.

Nerve Block

You may have a nerve block to control your pain before surgery. A nerve block is used when pain from surgery affects a smaller area of your body, such as an arm. There are several potential advantages of a nerve block. One advantage is that nerve blocks may allow for a significant decrease in the amount of opioid (narcotic) medication needed, which may result in fewer side effects such as nausea, vomiting, itching, drowsiness, constipation, and light-headedness. Nerve blocks generally last for 18-24 hours after surgery. We recommend taking pain medication prior to when your block wears off even though you are not experiencing pain; therefore, you do not fall behind in pain management when the block wears off.

Hearing aids

If you use hearing aids, wear them to the hospital on the day of your surgery. Wearing them will help you hear everything we need to tell you.

Dentures

You will be asked to remove all nonpermanent dental work before your surgery.

Contact lenses

Wear glasses if possible. If contact lenses must be worn, bring your lens case and solution. If glasses are worn, bring a case for them.

Hair

Wear your hair loose. Do NOT use clips, pins or bands in your hair. Do not use hair spray. A head cover will be provided on the way to the operating room. Before going to surgery, patients are asked to remove wigs and hairpieces

Family waiting area

When you are taken to the operating room, your family will be directed to the family waiting area, where they will wait during your surgery. Once the surgery is completed, your surgeon will call or visit your family to update them on your condition.

During Surgery

Once in the surgery suite, you will be assisted onto the surgical table. The surgery room itself is kept cool and the nurses will give you warm blankets if needed.

The anesthesiologist will attach monitoring equipment and check your IV. They will constantly monitor your vital signs, including your heart rate and rhythm, blood pressure, and amount of oxygen in your blood throughout your procedure.

An additional aspect of our culture of safety is called the "time out." In this safety measure, we confirm that we have the following before surgery begins:

- the correct patient
- the correct side and site marking
- the correct procedure
- the correct position on the operating table
- the correct implants, special equipment, and x-rays (when applicable)

Your surgery will last approximately 2 to 3 hours, possibly longer.

Post Anesthesia Care Unit (PACU)

After surgery, you will be taken to the Recovery Room/Post-Anesthesia Care Unit (PACU) where a nurse will care for you for at least the next 2-3 hours. The total time spent in recovery varies for each patient. The nurse will take your temperature, pulse, and blood pressure and assess your pain level. Pain medication will be started. You may feel very cold after surgery and may be warmed with blankets. Your arm will be in a sling. Dr. Stapleton will assess your ability to move your fingers, wrist, and elbow and the sensation in your hand.

To assist your breathing, you may receive oxygen through a small nasal tube or mask. Circulation aids will be applied to your lower legs to prevent blood clots. A cold pack system may be wrapped around your surgical site to reduce swelling and pain. An X-ray will be done on your operative shoulder.

At **Greenbrier Valley Medical Center**, friends and family cannot visit with you in the PACU but can meet you in your hospital room. Dr. Stapleton or the hospital staff will inform your family members that once they leave you in the pre-operative waiting area it may be a number of hours before they see you again.

Going To Your Room At Greenbrier Valley Medical Center

After leaving PACU, you will be transferred to a nursing unit. The nurses will check your vital signs and make you comfortable.

A member of your surgical team will visit you daily. Many times, this visit will occur early in the morning. You are encouraged to write down any questions you may have for your surgical team so they may be answered during the visit. In addition to your surgical team, you may also be treated by an internal medicine doctor, or his/her nurse practitioner or physician assistant. They will also be aware of your plan of care and will assist as needed.



CIRCULATION AIDS

Compression stockings: You will not be as active as you usually are; therefore, you have a greater chance of developing blood clots. To help prevent them from forming, you will need to wear TED stockings. They are to be used at all times, except when bathing. Once you are home and ambulatory and if your lower extremities are not swollen, then these can be discontinued.

Sequential Compression Calf Sleeves: You can move while using the pump. The sleeves inflate every 20 to 60 seconds and make it feel as though your calves are being massaged. These sleeves are a very important part of your care. Please help by making sure you wear them at all times while in bed. Tell your nurse if you do not feel the sleeves inflating.

COUGH AND DEEP BREATHING

Coughing and deep breathing are extremely important to your recovery after surgery.

Incentive Spirometer: When in the hospital, you will be using a small device called an incentive spirometer. A nurse will show you how to use it and help you with deep breathing exercises. It is important that you use the incentive spirometer 10 times every hour while you are awake. Using it helps reduce the chance of developing Pneumonia after your surgery and helps to keep your lungs clear and active during your recovery. Having good lung function will help you perform activities of everyday living once you return home.



PAIN MANAGEMENT

Effective pain management following surgery is a major priority for both you and your healthcare providers. Every effort is made to safely minimize your pain; however, it is normal to experience some discomfort following surgery.

You will be asked about your level of pain upon admission, and this will continue throughout your stay. You will be asked to "rate" your level of pain on a scale from 0 to 10. A rating of '0' means that you are not in any pain at all, a 5 means that you are experiencing a moderate amount of pain, and a 10 means you are experiencing the worst possible pain. This score will be used to select the best pain medicine to manage your level of pain. The doctors and nurses will ask you how the pain medicine is working and adjust the dose as needed. Again, remember to take pain medication before your block wears off to stay ahead of your pain.

Most commonly, post-operative pain is best managed with oral pain medications.

The following information will help you understand your options for pain treatment, describe how you can help your doctors and nurses control your pain, and empower you to take an active role in making choices about pain treatment.

- You may receive more than one type of pain treatment, depending on your needs and the type of surgery you are having. All of these treatments are relatively safe, but like any therapy, they are not completely free of risk. Dangerous side effects are rare. More common side effects, such as nausea, vomiting, itching, drowsiness, constipation, and light-headedness can occur. These side effects are usually easily treated in most cases.
- Be sure to tell your doctor and nursing staff if you are taking pain medication at home on a regular basis and if you are allergic to or cannot tolerate certain pain medications.

Why is pain control so important?

In addition to keeping you comfortable, pain control can help you recover faster and may reduce your risk of developing certain complications after surgery, such as pneumonia or blood clots. If your pain is well controlled, you will be better able to complete important tasks such as walking and deep breathing exercises

IMPORTANT! Do not wait until your pain is severe before you ask for pain medications.

BOWEL MANAGEMENT

Some patients become constipated because of the pain medication and inactivity. We recommend staying on a stool softener or laxative while you are taking pain medication.

Physical Therapy

The goal of therapy on the day of surgery is to begin doing activities that will help you move about while still abiding by your restrictions. Doing these activities will help you gain confidence. These activities may be performed at bedside by your nurse or a Physical Therapist.

Occupational Therapy

Occupational therapy is the part of your care plan that centers on teaching you how to take care of yourself once you return home.

Occupational therapy focuses on such things as:

- Activities of Daily Living (ADLs), which includes bathing and bathroom safety, dressing, toileting, and homemaking tasks
- Advice on possible equipment needed
- Education about restrictions

Care Coordination

During your surgical stay at the hospital, a Care Coordinator will visit with you to assist in making your discharge plans. You have already discussed your options in the pre-operative stage, but the Care Coordinator is there to help make the final arrangements. Most patients plan to be discharged home after surgery. Generally, outcomes after surgery are much better when patients go home. However, if there is concern about your ability to manage at home, the Care Coordinator will help discuss post-operative rehabilitation in the facility of your choice. The referral process will be started and you will be informed of the status and anticipated day of your discharge.

If you are going to a community skilled nursing or rehab facility, you may want to consider having a family member/friend drive you to the facility on the day of discharge from the hospital. Transportation can also be arranged through an ambulance service; however, there may be a cost for this service

After Discharge

You will be discharged from the hospital when it is felt that you are safe to be discharged and your pain is under control. This is a collaborative decision made by you, your nurse, and the physical therapist. It varies for each individual patient.

Your nurse will review your discharge instructions, medications, and address any questions you may have.

If you are having surgery at the hospital and you have not met the criteria to be discharged home, you will be discharged to a skilled nursing facility of your choice. The facility will be informed of your hospital stay and a time of anticipated arrival will be arranged.

Please have your ride available on this day. Your team will let you know the approximate time. When notifying the person coming to pick you up, ask them to bring a pillow for your comfort. If you chill easily, it would be a good idea to have them bring a blanket.

Narcotic Fact Sheet for Patients

Please read the information below regarding what to expect following your surgery, the goal of post-operative pain management and the side effects of the medications prescribed.

What to expect after surgery

- Almost all surgical procedures result in some level of pain and discomfort. Pain and discomfort are generally greatest immediately after surgery and subside as time goes on.
- Reducing your pain is a priority for caregivers
- Over time, your pain will reduce and may be eliminated completely
- Oral narcotic medication is frequently administered to patients after surgery to help control post-operative pain. It is important to note that although these medications are effective for the treatment of acute pain, use beyond that can be detrimental to your health.
- It is vital that you discontinue the use of these medications as soon as your pain allows. Specifically, the medication should only be taken as needed as prescribed (usually every 4 hours). The medication is not required for the prescribed time interval.

Narcotic medication: Facts you need to know

- Physical dependence on opioids (which means the absence of opioids can produce withdraw symptoms) can occur at prescribed doses.
- Opiate abuse is on the rise in recent years and has tripled in the US since 1990.
- 5 million people in the United States are addicted to opiates.
- There are 17,000 opiate overdoses per year in the US.
- There were nearly 5 million drug related ER visits in 2010; 425,000 from narcotic pain relievers.
- Every day in the US, 46 people die of prescription drug overdoses.
- Unintentional deaths from prescription narcotics outnumber those of heroin or cocaine.

Adverse reactions to opioids include:

- Sleepiness
- Difficulty controlling arms/legs
- Constipation
- Limit ability to fight infection
- Itching
- Hormonal imbalance
- Decreased breathing
- Drug interactions
- Death

Potential risk factors for opiate abuse:

- Age 18-34
- Male
- 4 or more opioid prescriptions
- Refilling prescriptions early
- Opioid prescriptions from 2 or more pharmacies or physicians

Early symptoms of withdrawal:

- Agitation
- Anxiety
- Muscle aches
- Insomnia
- Sweating

Late symptoms of withdrawal:

- Abdominal cramping
- Diarrhea
- Nausea
- Vomiting

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Rockville, MD: Substance Abuse and Mental Health Services Administration, 2012.

Gregory TB. How to safely prescribe long-acting opioids. *J Fam Pract*. 2013 Dec;62(12 Suppl 1):S12-8. Opioid Painkiller Prescribing (Centers for Disease Control and Prevention) <http://www.cdc.gov/vitalsigns/opioid-prescribing/>

Hill KP, Rice LS, Connery HS and Weiss RD. Diagnosing and treating opioid dependence. *J Fam Pract*. 2012 October;61(10):588-597.

Painkiller Addiction Impacts Your Children <http://www.percocetabusehelp.com/painkiller-addiction-impacts-your-children>

White AG, Birnbaum HG, Schiller M, Tang J, Katz NP. Analytic models to identify patients at risk for prescription opioid abuse. *Am J Manag Care*. 2009 Dec;15(12):897-906.

Emergency Medicine: A Comprehensive Study Guide (6th edition 2004)

Other Concerns/Considerations

Infection

What is a surgical site infection (SSI)?

A surgical site infection (SSI) is an infection that occurs after surgery in the part of the body where the surgery took place. Most patients who have surgery do not develop an infection.

Some common symptoms of surgical site infection are:

- Increased redness and pain around the area where you had surgery
- Drainage of cloudy fluid from your surgical wound
- Fever

DVT/Blood Clot

Deep Vein Thrombosis (DVT) is a formation of a blood clot. This is a potential complication following a total shoulder replacement. A blood clot from your leg can travel to your lungs and cause a serious complication.

Sudden onset of shortness of breath and chest pain are warning signs of this condition. If you develop any of these signs, call 9-1-1.

Symptoms of a DVT may include:

- Pain in your calf and leg
- Increased swelling of your thigh, calf, ankle, or foot
- Redness
- Increased skin temperature at the site

Prevention of blood clots is the best treatment:

- Exercise, increased mobility
- Blood thinners
- Support stockings

Future Procedures – Dental work

The following recommendation is taken from the ADA Chairside Guide (© ADA 2015)

- In general, for patients with prosthetic joint implants, prophylactic antibiotics are not recommended prior to dental procedures to prevent prosthetic joint infection.
- For patients with a history of complications associated with their joint replacement surgery who are undergoing dental procedures that include gingival manipulation or mucosal incision, prophylactic antibiotics should only be considered after consultation with the patient and orthopedic surgeon

Smoking

If you smoke, you are required to stop prior to surgery. Stopping smoking will reduce the risk of breathing (respiratory) problems and complications from anesthesia that is used for surgery. Smoking also affects wound healing after surgery and puts you at an increased risk of infection.

There are many other health benefits from stopping smoking. Stopping smoking helps to:

- prolong your life
- decrease your risk of disease, including heart disease, heart attack, high blood pressure, lung cancer, throat cancer, emphysema (a type of lung disease), ulcers, gum disease and other conditions
- help you to feel better (if you stop smoking, you won't cough as much, have as many sore throats, and your stamina will improve)

We know it is an extremely difficult process to stop smoking, but we will be flexible and will work with you in scheduling surgery. Speak with your primary care physician for information on how to stop smoking. For more information about other smoking cessation programs in your community, please contact your local American Heart Association at 1-800-242-8721 or American Cancer Society at 1-800-227-2345.

Alcohol Use

Drinking alcohol can greatly affect the outcome of your surgery. Your recovery from surgery may not proceed as planned if your health care providers are not aware of your history of alcohol use. Tell your health care provider how many drinks you have per day (or per week). Although it may be difficult to discuss alcohol use with your healthcare team, it is done for your safety and to improve the outcome of your surgery.

During your pre-surgical visit, you will be asked a series of questions. Your answers will help determine your risk of alcohol withdrawal and other alcohol related problems that could occur after surgery. Please respond to the questions as honestly as possible. Remember, any information provided is held in strict confidence. We are here to help you prepare and recover from your surgery as quickly and safely as possible.

GENERAL DISCHARGE INFORMATION AFTER: SHOULDER REPLACEMENT

SLING/ACTIVITY:

- Sling should be worn at bedtime and outside of the home for the first 6 weeks after surgery. It does not need to be worn while you are at home or you are eating/drinking, however, it is very important to avoid rotating your hand away from your body. Please see the picture to the right as a reference of maintaining neutral shoulder rotation. The **hand of your operative arm** should remain in the box, and in front of you at all times.



- If you are wearing your sling at all times for comfort, it is important to come out of your sling 3-4 times a day to straighten your elbow and move your wrist and fingers to avoid stiffness.
- Until you are more comfortable you will need some help to remove your sling. You will need to unclip the shoulder strap and the Velcro strap across your forearm. Be sure to support your arm while the sling is being removed and put back on. Do not actively move your shoulder to remove your sling.
- You are unable to drive a car as long as you need to utilize a sling.



ICE:

- An ice device or ice bag (not directly touching the skin) should be utilized to reduce swelling and pain. Please ice every 3-4 hours for about 15-20 minutes each time until swelling subsides.

WOUND CARE:

- A waterproof “Mepilex” dressing will be applied to your incision after surgery. Remove this dressing on post operative day 7 and leave the steri-strips underneath clean dry and intact. These will fall off on their own normally after approximately 2 weeks. You may shower with this dressing and after the dressing is removed, but no soaking in baths, pools or hot tubs. If you notice staining (darkening) of the dressing, please contact the office. Bruising in your surgical arm and swelling of your hand may occur in the days following surgery and is common.

PAIN MEDICATION:

- You will be given a prescription for narcotic **pain medication**. Take this as needed until the pain is minimal. You should also continue to take over the counter Tylenol or anti-inflammatories (NSAIDs) as directed for pain control. These medications have different mechanisms and can be taken together.
- Tylenol (acetaminophen) - **2 tabs (regular strength Tylenol, 325 mg each) every 6 hours as needed**, DO NOT exceed 3,000 mg in a 24-hour period.

Anti-inflammatories (NSAIDs):

- Mobic (meloxicam) – **1 tablet (7.5 mg) twice per day**, beginning 2 days before surgery to 5 days after surgery (do not take with any additional NSAIDs if you take the Mobic).

OR, YOU CAN CHOOSE TO TAKE ONE OF THE FOLLOWING:

- Advil or Motrin (ibuprofen, available over the counter) - **2 tabs (200 mg each) every 6 hours as needed**.
 - You may take Aleve or Naprosyn (naproxen) instead of ibuprofen, but Aleve dosage differs, and is **1-2 tablets (225 mg each) every 12 hours as needed**.
- You can alternate these medications, i.e., Tylenol at 8 am, Advil at 11am, Tylenol at 2pm etc.
- If you take any oral anticoagulation, you may not be able to take any NSAIDs
- If you need a refill of your pain medication, please call the office at least 2 business days in advance.
- You should take a **stool softener** while on pain medication, as these may cause constipation. **Colace** can be purchased over-the-counter and can be taken twice daily.
- You may also have been given a prescription for **Zofran**, which you can take as needed for nausea.
- **Please see the medication chart provided for schedule of medications**

FOLLOW UP:

Your first visit should be approximately 2 weeks after surgery call the office for appointment if one is not provided for you. If you are unsure of when your follow up visit is scheduled, please contact the office.

WHEN TO CONTACT YOUR DOCTOR AFTER SURGERY

- You have a fever over 101.4 degrees Fahrenheit
- You have drainage from incision
- The area around your incision becomes hot to touch, red, or swollen
- You have increased pain that is not relieved with pain medication
- You develop sudden or severe calf pain, or swelling in the calf that does not decrease after elevation of leg
- You have questions regarding activity or your medications


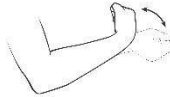
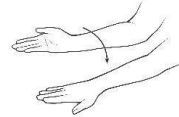

PHYSICAL THERAPY:

- Please perform elbow, wrist and finger range of motion on a regular basis after surgery.
- It has been found that most patients do well with progressing their motion and strength through normal daily activities and in many cases formal physical therapy may not be necessary. At each post-operative appointment, Dr. Stapleton will teach you exercises to do on your own to work on range of motion. Although you should progress with some gentle range of motion, do not force any shoulder motions. Most importantly, do not let anyone (family members, physical therapists, etc.) force your arm into uncomfortable positions. Lastly, if you do develop a lot of stiffness post operatively Dr. Stapleton will prescribe you physical therapy. The rehab protocol for the physical therapists to follow can be found on Dr. Stapleton's website.

Discharge - Until 1st Follow-Up Appointment

Instructions

- Perform these exercises 2-3 times per day with 10 repetitions per session.
- Encourage early range of motion of your elbow, wrist, and hand. Please begin this immediately.

1. Open and close your hand.	
2. Bend your wrist up and down.	
3. Turn your palm up and down in a motion similar to turning the pages of a book.	
4. Bend and straighten your elbow as much as possible	

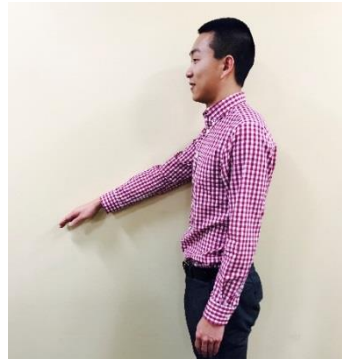
First Post-Operative Visit Instructions

At your first post-operative visit (two weeks from your surgical date), Dr. Stapleton will show you exercises to begin gentle range of motion of your shoulder. These exercises should be done in sets of 10, 3-5 times daily. Dr. Stapleton may also recommend that you remove your sling as much as possible to do activities in front of you. It is important to remember not to rotate your arm to the side any further than seen to the right. You should also be sure to continue to wear your sling while sleeping and when in public.

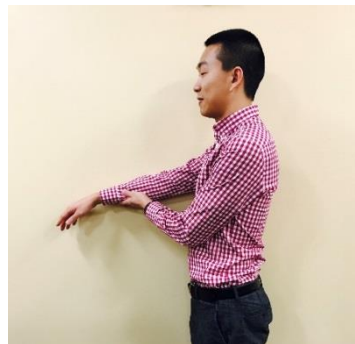


Exercises

Begin with your operative shoulder against a wall. Slowly lift your arm in front of you as high as possible. Your shoulder should remain against the wall to prevent you from rotating your shoulder outwards while doing this exercise.



Next, use your other arm to help lift your operative arm gently until you reach resistance. Stay in this position for 10 seconds and slowly release. Your non-operative arm should only be doing approximately 10% of the work.



Your goal by your next post-operative visit should be at least 90° as seen to the right.

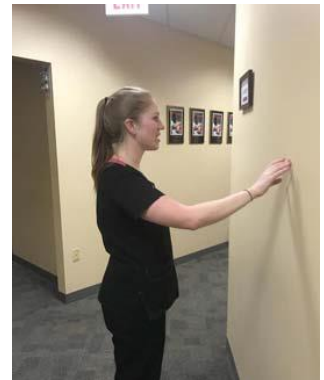


Second Post-Operative Visit Instructions

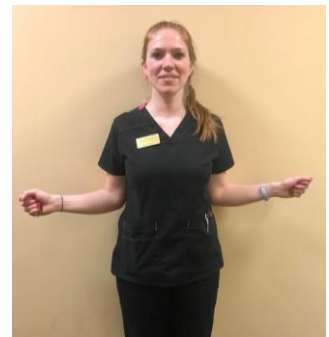
At your second post-operative visit (6 weeks from your surgical date), Dr. Stapleton will show your exercises to begin gentle range of motion of your shoulder. These exercises should be done in sets of 10, 3-5 times daily. Dr. Stapleton may also recommend that you remove your sling as much as possible to do activities in front of you.

Exercises

Forward Elevation: Continue to work on lifting your arm in front of you. You may use a wall and “walk up” the wall with your fingertips as displayed to the right.



External Rotation: You can gently begin to rotate your arm outwards after your **second post-operative** appointment. You can use your non-operative arm to help apply light pressure to help you. If you underwent an Anatomic shoulder replacement Dr. Stapleton does not want you to do any external rotation until 8 weeks post-op.



Internal Rotation: You may also now start to reach behind your back. This is generally the most difficult motion for patients after shoulder replacement.



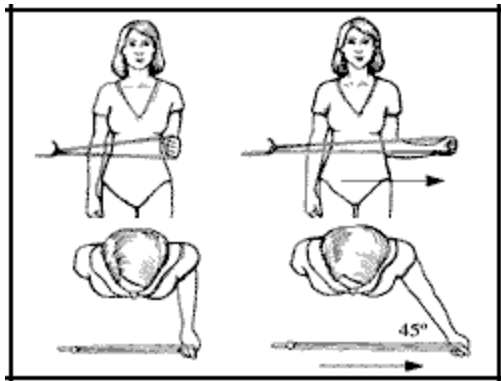
Third Post-Operative Visit Instructions

****If using TheraBands:** use light/medium resistance bands, which are yellow, red, green, blue. Other resistance bands can be used, as long as their overall resistance is < 15 lbs (usually called #0, #1, extra-light, or light).

If using free weights, use weights less than 5 pounds.**

1) External Rotation:

Keeping your elbow at your side, turn your hand outward against resistance. Perform 3 sets of 10 repetitions, 2-3 times per day.



(Banded)



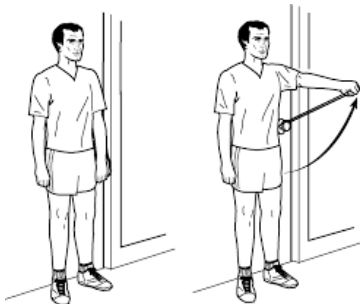
(Dumbbell)



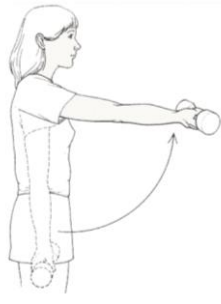
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2) Forward Raise:

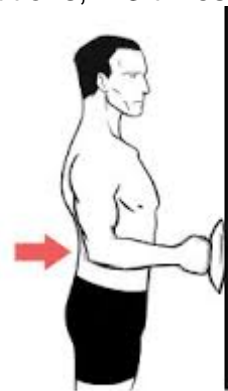
With light resistance, lift your arm in front of you to approximately shoulder height. Lift higher as you can tolerate. Perform 3 sets of 10 repetitions, 2-3 times per day.



(Banded)



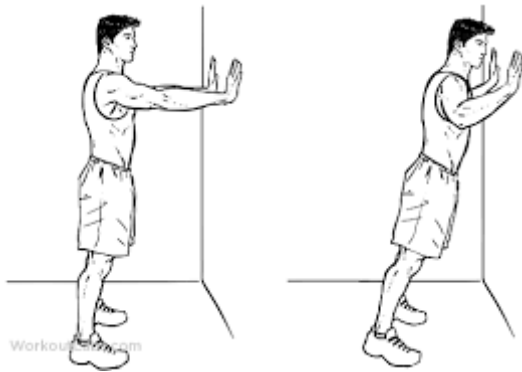
(Dumbbell)



(No Equipment)

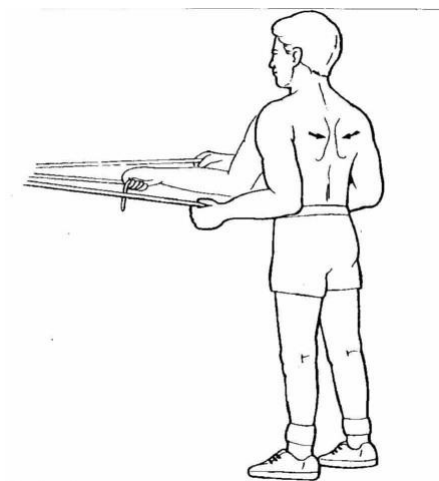
3) Wall Push Up:

Starting with your body upright, place your hands on the wall. Slowly lower yourself as tolerated, and press back to a standing position. Perform 3 sets of 10 repetitions, 2-3 times per day.

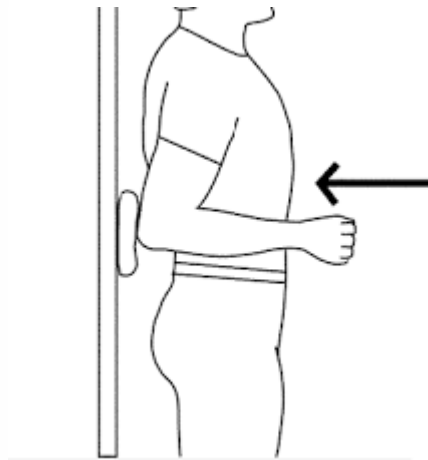


4) Scapular Retraction:

Keeping your hands in front of you, squeeze your shoulder blades together for 3 seconds, then relax. Perform 3 sets of 10 repetitions, 2-3 times per day.



(Banded)



(No equipment)

Checklist for your upcoming surgery at Greenbrier Valley Medical Center

After booking Surgery:

- ☐ Contact any specialists (i.e. Cardiology, Hematology/Oncology, Rheumatology) for documentation and clearance that they are comfortable with you proceeding with shoulder replacement surgery.
- ☐ If you take any medications such as immunosuppressants, hormone replacement, rheumatoid arthritis or osteoporosis medications, contact the prescribing physician as there may need to be changes to these before surgery.
- ☐ Make sure that no dental appointments are booked for 3 months after your surgical date.
- ☐ You cannot have a cortisone injection into the operative shoulder within 3.5 months of surgery.
- ☐ Visit and view Dr. Stapleton's website for patient education video series for shoulder arthroplasty at:

www.stapletonortho.com

Within one to months of Surgery:

- ☐ Notify Dr. Stapleton's staff of any change in medical conditions such as open wounds, rashes and any infections as they could impact your surgery.
- ☐ If you are on a blood thinner, consult with the provider who prescribes for a plan to stop safely before surgery. Be sure to know the details of this plan and when exactly to stop.
- ☐ Begin to make arrangements to have someone (spouse, children, friend etc.) at home with you for a few days after surgery, to help you with day-to-day tasks.

Within one month of Surgery:

- ☐ If you have not received the date for your pre-screening appointment, contact Dr. Stapleton's office.
- ☐ If you are prescribed prednisone for a medical condition, contact Dr. Stapleton's office.
- ☐ Be proactive in keeping healthy. Even simple illnesses such as a common cold could cancel surgery.
- ☐ If any dental work is taking place within the last month, contact your dentist immediately for any signs of infection. You need to be clear of any infections prior to surgery.
- ☐ Your pre-screening at Greenbrier Valley Medical Center will last between 1-2 hours. There can be delays, but this day is vital to ensuring you have a safe and comfortable experience for surgery. At this appointment you will be able to

discuss any concerns you have with regards to medications, including anesthesia. You will also be able to inquire about VNA or rehab at this appointment and coordinate that care for after surgery.

- ☐ If you are a smoker, remember that you need to be completely off of cigarettes by the time of your surgery, or it may be canceled.
- ☐ Consider purchasing a cold therapy unit for your shoulder. These are available online, call the office for more details.

Within one week of Surgery:

- ☐ Stop all anti-inflammatories, unless otherwise directed by a physician, 7 days prior to Surgery, Tylenol is okay to continue.
- ☐ Make any necessary arrangements at home to ensure safety after surgery.
- ☐ Be sure to know the date, time and location of your post-operative appointments.
- ☐ Expect a call from Greenbrier Valley Medical Center between the day prior to surgery, informing you of your arrival time.

