
My Guide to

Total Shoulder Replacement

Shoulder Osteo-Arthritis



Please bring this booklet, and a pen, with you to the hospital

- **If your health changes, or you develop a cough/cold/fever or any other illness within one week before your operation, please call your surgeon as soon as possible**
- **If you have a cough/cold/fever, please call the Preoperative Clinic to reschedule your appointments**
- **Please inform us ahead of time if you require an interpreter**

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Introduction

Patients manage their hospital stay, and recover from their surgery better when they are prepared for surgery. This guide will help you understand what to expect before your surgery and after your return home.

The Ministry of Health and Long-Term Care of Ontario has introduced new care plans for all patients having shoulder replacement surgery. The goal of this plan is to increase your satisfaction, help you to recover and return home as quickly and safely as possible, and is quite different than what you might have experienced or heard of in the past.

DISCHARGE ARRANGEMENTS

- Expect to go home on the day of your surgery, or the next morning.
- Have a discharge plan in place following your surgery. This may include assistance in your home, staying at a family or friend's home, or arranging a short stay in a retirement home. A list of respite care locations can be provided to you.
- Someone from Cambridge Memorial Hospital will call you about 8 weeks prior to surgery to review the discharge resources available and talk to you about your options for rehabilitation following surgery. Most patients will attend a physiotherapy clinic covered by OHIP benefits. You can also organize your own Physiotherapy privately. Your first Physiotherapy session following your surgery should be booked to occur 2-3 weeks after your surgery date. You should book this session as soon as you know your surgery date.
- You may be referred by your surgeon to receive homecare services in your area. If you qualify for services, arrangements will be made before you leave the hospital.

It is important that you prepare for surgery and participate in your recovery because this will ensure the best outcome for you. There are many educational resources available to help prepare yourself and your home before surgery. You will also have a chance to ask any questions you may have during your preoperative visit.

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STEP 1 Needing Total Shoulder Replacement Surgery

Welcome to Cambridge Memorial Hospital (CMH). Our goal is to prepare you for a successful outcome from your shoulder replacement surgery. Total shoulder replacement will improve your quality of life, independence, and overall health. This booklet will tell you what to expect before and after your surgery and how to prepare for going home.

Please bring this booklet to all of your appointments and to your surgery.

You should arrange for a family member or friend to be your Coach for the surgery. This person should come with you to all of your appointments if possible. A Coach is not only for support; they also help you understand what to expect at each step along the way. Your Coach plays a very important role in your care and will be your designated person for us to speak with in addition to yourself.

At CMH, we have a team approach to providing care. In addition to your surgeon, anesthesiologist, and nurse, some of your other care team members include:

Physiotherapist (PT): Your PT will teach you exercises and techniques to help with your recovery and mobility.

Occupational Therapist (OT): An OT may teach you how to perform daily living activities such as putting on your clothes, and bathing. The OT will recommend equipment based on your physical abilities and home environment.

Acute Pain Service (APS): The Nurse Practitioner on the APS will see you twice a day while you are in hospital and the Nurse Practitioner will adjust your pain medications whenever needed to ensure that you receive enough pain relief so that you can do your exercises and become mobile more comfortably.

Home & Community Services: This is a government funded service that connects you with the care you need at home and in your community. If you require assistance and qualify, a care coordinator will assess you and coordinate home services for you.

Understanding the Shoulder Anatomy

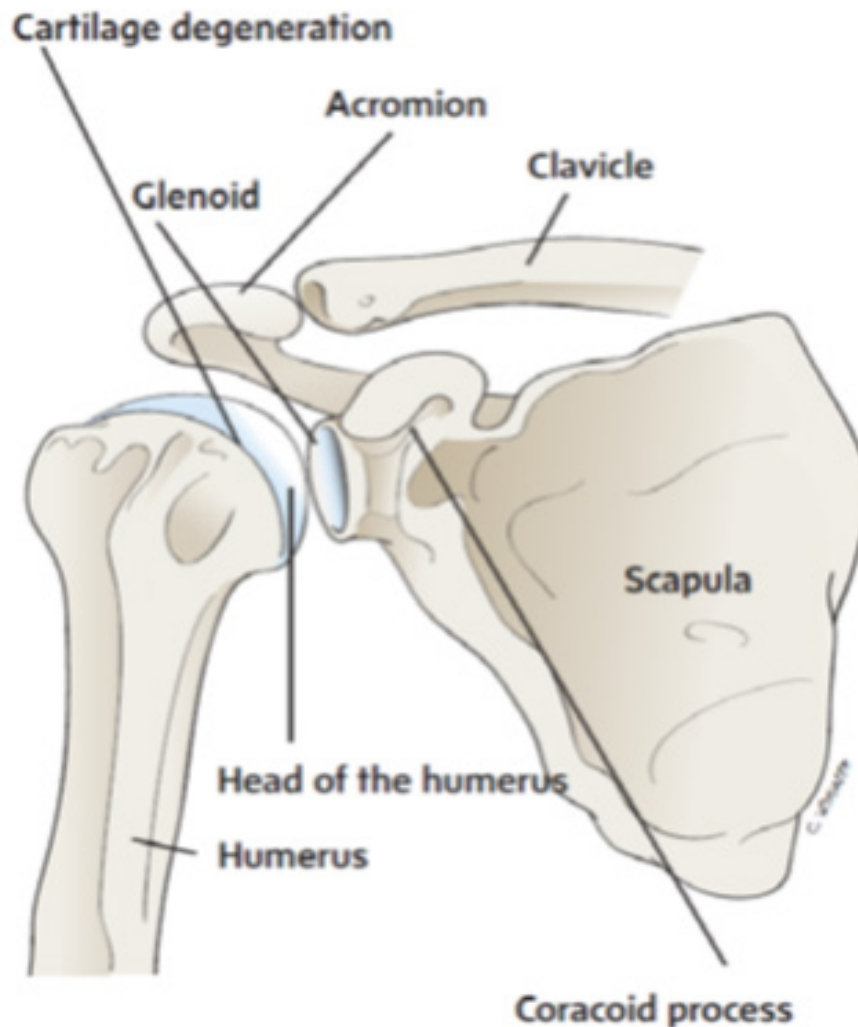
The shoulder joint allows your arm to move in a large range of motion, in all directions: forwards, backwards, sideways and rotation. The upper end of the humerus (arm) bone ends in a ball shape and fits onto the saucer-shaped socket called the glenoid.

The glenoid is part of the scapula (shoulder blade).

The rotator cuff muscles surround the shoulder joint and help to stabilize the shoulder.

The surfaces of the humerus and glenoid are lined with cartilage which acts as cushioning and allows the bones to move easily over each other.

Thickened tissue called capsule also encloses the shoulder providing stability.



What is Shoulder Replacement Surgery ?

During surgery, the skin, muscles, and capsule of the shoulder are cut and the joint is opened. The head of the humerus bone is removed and replaced with a rounded metal head on a stem inserted into the shaft of the humerus. The other side of the joint may be replaced with a smooth plastic shell that is curved to fit smoothly with the humerus implant. When both sides of the shoulder joint are replaced it is called a total shoulder arthroplasty. If only the humerus is replaced it is called a hemi-arthroplasty.

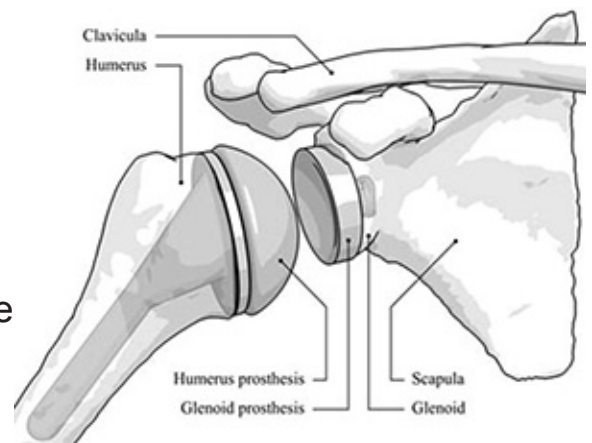
Goal of Shoulder Replacement Surgery

The primary goal of shoulder replacement surgery is to decrease pain. Degeneration of the cartilage or bone and weakening of the muscles, often due to arthritis, can cause severe pain and stiffness in the shoulder joint. Shoulder replacement removes damaged bones and cartilage and provides smooth working surfaces. It may also improve function of the shoulder.

Types of Shoulder Surgery

Total Shoulder Arthroplasty

(Replacement) – A metal stem is placed into the humerus bone of the arm. It has a rounded end which sits on top of the stem and allows the humerus to move smoothly in the shoulder joint. A rounded plastic shell is placed on the other side of the joint (glenoid). It's curved to fit the rounded metal humerus piece.

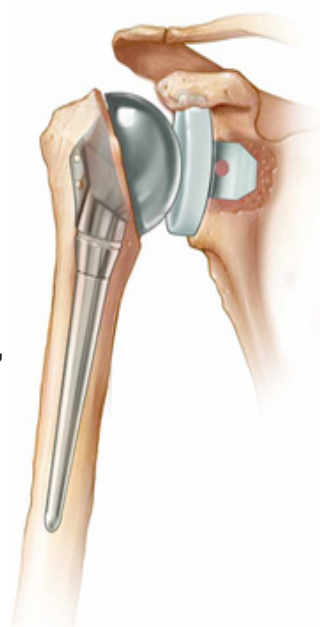


Reverse shoulder arthroplasty

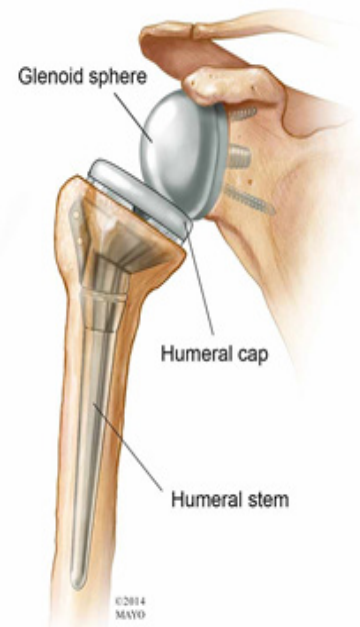
(replacement) – The reverse shoulder arthroplasty is mainly used in patient who have severe rotator cuff weakness or degeneration, severe trauma or require revision surgery.

The rotator cuff muscles are no longer able to hold the shoulder joint stable. After removing the ball of the humerus, a metal stem with a curved plastic shell is inserted in the humerus bone. A metal base plate is inserted with screws into the glenoid (scapular) side of the shoulder joint.

Total shoulder arthroplasty



Reverse shoulder arthroplasty



Possible Complications Related to your Shoulder Surgery

Dislocation/Instability of the Shoulder: Stability of the shoulder relies on the rotator cuff muscles and capsular tissue to help hold it in proper position. After surgery the shoulder can move “out of joint”. The incidence of dislocation or instability is five to six per cent with a total shoulder arthroplasty and less than one per cent with reverse shoulder implant.

Infection: Infection in an artificial shoulder is a very serious complication. If infection occurs the implanted pieces may need to be removed. After antibiotic treatment the pieces may be re-implanted. Infections occur in less than one per cent of patients.

You must avoid contracting infections after surgery (ie. sinus, chest, dental, skin). Any infections can settle in your new shoulder with very serious results. Treatment should be sought quickly. If you are having a urologic procedure (example kidney stone operation or lithotripsy), bowel surgery or colonoscopy you MAY need antibiotics before the procedure. Speak with your surgeon. Rheumatoid arthritis or immunocompromised patients should always receive antibiotics with these procedures.

Loosening of the shoulder implant: Over time implanted pieces may loosen from the bone resulting in pain or instability and possibly revision surgery.

Nerve or blood vessel damage: Nerves that help your hand move and blood vessels that provide circulation sit very close to the shoulder joint. Complications from nerve or blood vessel damage are rare and less than one per cent. If nerve damage does occur it may leave numbness, weakness, or paralysis of the hand or arm.

Swelling (Edema): The normal healing process may cause swelling in your arm or hand. Elevating the arm or hand can help. Follow any movement precautions you are given for your shoulder and arm.

Returning to Normal Activity

Your age, occupation, hobbies, other medical conditions (e.g. diabetes, heart disease, obesity, etc.), usual activities, and the condition of your joint will determine how soon you can return to your normal activities. Your surgeon will discuss when you can return to your normal activities, and any limitations you may have.

Returning to Work

Depending on the type of work you do, your surgeon will advise you when it is safe for you to return to work. This can vary from weeks to months.

Managing Pain and Activities While Waiting for Surgery

Pain: Applying warm or cold packs on your shoulder for 15 minutes 2 to 3 times daily helps to relieve muscle pain. Make sure you have a thick layer between your skin and the heat/cold source. Check your skin every few minutes to make sure you do not burn yourself. Do not use pain relief creams or ointments with a warm or cold pack as this could cause a chemical burn. Warm showers and pain medication prescribed by your doctor can also help.

Diet: We suggest that you maintain a healthy diet while you wait for surgery. Foods high in protein, vitamin C, zinc, iron, and calcium are important for wound healing and for good recovery after surgery.

Smoking: If you smoke, it is important that you stop. If you are unable to stop, try to cut down the number of cigarettes you smoke per day. Stopping or decreasing the amount you smoke will improve the condition of your lungs and help you heal. If you do smoke, we will offer you nicotine replacement therapy while you're in the hospital, free of charge. Please note there is no smoking allowed on hospital property.

Drinking: Please provide a truthful description of your alcohol intake. Try to decrease your use of alcohol before your surgery. It can affect your recovery.

Fitness: The best activities to remain active with osteoarthritis of the shoulder are swimming and walking.

Physiotherapy: May help reduce pain and improve your mobility and strength.

Activity: Stop or reduce the activities that make your shoulder sore.

Once you and your surgeon decide that you are a candidate for surgery, you will sign the following forms with your surgeon.

- Consent for Surgery
- Consent for blood transfusion or blood products

You will be given the following form to complete and bring back to your preoperative assessment appointment:

- Patient Questionnaire-Department of Anesthesia (Completed by you)

PRECAUTIONS BEFORE SURGERY

Important: Follow these instructions before surgery:

- **Do Not** have any dental work one month before your surgery, if possible (this may result in the cancellation of your surgery); wait until 6 months after your surgery
- **Do Not** have any injections into your joint within 6 months before your surgery (check with your surgeon)
- **Do Not** shave the area where you will have surgery one week before your surgery date.
- **Do Not** have any pedicures or manicures within 1 week before your surgery

STEP 2 Preparing for Surgery and Discharge Home

It is very important that you start planning for your surgery, hospital stay, and discharge home. You can expect to go home on the day of your shoulder replacement surgery, or the day after your surgery.

CHECKLIST FOR DISCHARGE HOME

- Plan for someone to drive you to and from the hospital
- Put frequently used items in your home at a waist to shoulder height to minimize bending down or reaching up
- Remove loose rugs and other items that you could trip on
- Make sure staircase handrails are securely fastened to the wall
- Arrange for a support person or Coach to be available
- If you think you will need help with daily living activities after surgery (e.g. bathing, toileting, getting dressed, etc.), you can contact your Home & Community Services to see if you qualify for assistive services
- Arrange for grocery delivery (if available) and/or stock up on healthy frozen meals
- Arrange for someone to care for your pets, do your laundry, clean your house, water your houseplants

Physiotherapy

You must make plans **in advance** to follow up with outpatient physiotherapy that will start after discharge from the hospital. Many communities, including KW and Cambridge, have an OHIP funded clinic that provides therapy after shoulder replacement. You will need to call and make an appointment well in advance. Try to schedule your first appointment for 2-3 weeks after your surgery date.

If your community does not offer a clinic, Home & Community Services may be involved in arranging physiotherapy follow-up.

If you prefer, you may book a physiotherapy appointment at any clinic of your choosing. Schedule an appointment well in advance for 2-3 weeks following your surgery date.

ACCOMMODATION AND COMMUNITY SERVICES

Private Respite Care After Surgery

Some people choose to stay in a respite care facility after their shoulder surgery. Respite care in a retirement home, after surgery, means that you may have all or some of the following:

- A fully furnished room
- Meals
- Assistance with bathing and dressing
- In room emergency bell system
- 24/7 assistance from qualified personnel

If you decide to purchase respite care, you must make these arrangements before your surgery and the bed must be available when you are discharged.

Your discharge from hospital will not be delayed if your respite bed is not available on your day of discharge.

Please note that there will be a charge for these respite services, as they are not covered by OHIP.

Before your surgery, tell your care team and your family physician about your plans for respite care.

A list of local facilities offering respite care services can be provided to you upon your request.

STEP 3 Pre-operative Assessment Clinic

PREPARING FOR THE PRE-OPERATIVE ASSESSMENT

- Complete your Pre-Anesthetic Patient Questionnaire
- Ask your drug store to print a list of all your current medications and bring this list with you to your preoperative clinic appointment
- Bring all of your medications, vitamins and herbal supplements that you are taking in their original bottles to your preoperative clinic appointment
- Wear loose, comfortable clothing.
- Be prepared to spend 4-6 hours at the hospital for the preoperative clinic appointment (if you are diabetic, bring your lunch if needed)

WHAT TO BRING TO THE PRE-OPERATIVE APPOINTMENT

- Your health card
- The guide book
- The envelope you received at your surgeon's office, with the Pre-Anesthetic Patient Questionnaire completed
- Your medication list
- Your medications, vitamins, herbal supplements in their original containers
- A snack and water or juice
- Please bring a cellular phone or tablet to your pre-operative assessment clinic visit if you have access to one
- Your Coach/support person

WHAT TO EXPECT

- You will see a nurse to review all of your completed forms, have your blood tested, and have an electrocardiogram (ECG) done if necessary
- You will see a pharmacist to review your medications
- You will see an anesthesiologist to discuss your anesthetic options
- You will see a medical doctor, if needed

ARRIVING AT THE HOSPITAL

- Go to the Preoperative Clinic on the Main Floor (level 1) in order to be registered
- You will be directed to the Preoperative Assessment Clinic, located on the Main Floor (level 1)
- You will wait in the Preoperative Clinic waiting area for your assessment appointment to begin

Anesthesia

When you meet with the anesthesiologist, your health history will be reviewed, you will be assessed by the physician, and various sedation options will be discussed with you.

General Anesthesia with Regional Nerve Block:

This is the most common method of anesthesia for shoulder replacement surgery. When having general anesthesia, you will receive medicine to “put you to sleep”.

General Anesthesia:

Several different medicines given through an intravenous line (IV) to put you to sleep.

Risks of General Anesthesia:

- Mild sore throat for a few days
- Nausea and vomiting
- Drowsiness after surgery
- Slight confusion or memory loss for a short time
- Bringing up stomach contents into your lungs (aspiration)

Regional Nerve Block:

Your anesthesiologist may suggest you have a nerve block. This technique involves injecting a “local anesthetic” to freeze one of the main nerves around your shoulder. This nerve causes you pain, so by “freezing it”, your pain will be reduced. The injection is given before you receive the general anesthetic. We expect the nerve block to provide pain relief for 12-24 hours.

MEDICATION ROUTINE BEFORE SURGERY

STOP THESE MEDICATIONS

Date	Medication

TAKE THESE MEDICATIONS

Date	Medication

PHARMACY PREOPERATIVE ASSESSMENT

Below are commonly asked questions about medications and having shoulder replacement surgery. While you are in the hospital, a pharmacist is always available to answer any additional medication questions you may have. On the day of your Preoperative Assessment appointment, a pharmacy technician will review your medications with you, and will complete a list of your medications for your surgeon and anesthetist to use.

1. HOME MEDICATIONS

- The hospital will supply most of your home medications during your stay. During your Preoperative Clinic visit, a pharmacy technician will alert you of any medications that the hospital does not have in stock (“non-formulary”). The technician will ask for your permission to use your home supply of medication while you are in the hospital.
- If you agree to provide a supply of your medications for use in the hospital, please bring them in their original labelled containers for safety reasons.
 - If your medications are organized in blister/compliance packaging, please ask your community pharmacy to provide you with a one-week supply in a labelled container because the hospital cannot give medications from blister/compliance packages
 - Please DO NOT bring any loose tablets of medication into the hospital
- Your nurse will give you/”administer” any non-formulary medications when it is time for them to be given
- Non-formulary medications are stored in patient specific, locked medication drawers in a secure location on the unit, as per hospital policy, to ensure the safety of all patients. The medications are not to be kept at the bedside.
- Your supply of non-formulary medications will be returned to you at discharge

2. VITAMINS / HERBAL SUPPLEMENTS

- Stop all vitamins and herbal supplements 7 days before surgery unless you are told otherwise by your surgeon or anesthetist
- Vitamins and herbal supplements can interact negatively with prescription medications. Check with your pharmacist or physician before taking any of these products
- Calcium and vitamin D supplements can be safely resumed after surgery
- Ask your anesthesiologist or orthopedic surgeon if you have any questions or concerns about stopping or restarting any vitamins or herbal supplements

3. NON-STEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDS)

{e.g. Ibuprofen (Motrin®, Advil®), Naproxen (Aleve®), Meloxicam (Mobicox®), Diclofenac (Arthrotec®, Vimovo®), Celecoxib (Celebrex®)}

- If you are taking this type of medication, your anesthetist will tell you when to stop taking these medications before your surgery
- These medications may interact with anticoagulants (blood thinners) and increase the risk of bleeding

4. ANTICOAGULANTS (BLOOD THINNERS)

{e.g. Apixaban (Eliquis®), Rivaroxaban (Xarelto®)}

- If you are on blood thinners before surgery, your anesthesiologist will tell you if/when you should stop taking these medications before surgery.
- Your orthopedic surgeon will tell you when it is safe to start taking these medications again after surgery

STEP 4 Surgery

THE DAY BEFORE SURGERY

- You may eat a normal supper (try to avoid spicy and gassy foods)
- No food can be eaten after midnight
- You may drink clear fluids (water, apple juice, sport drinks) up to 4 hours before the time your surgery is booked for
- Take a shower with the Chlorhexidine Soap (2% or 4% solution) that was given to you at your Preoperative Clinic appointment
- **The shower can be done on the evening before your surgery, or the morning of your surgery**
 - Do not use the Chlorhexidine Soap on your face or near your eyes and ears
 - Do not use the Chlorhexidine Soap if you are allergic to it
 - If you develop a rash while using the Chlorhexidine Soap, stop using it and notify the hospital staff when you come in for your surgery the next day
- Do not remove hair from the area of your body where the surgery will take place for one week before your surgery. Removing hair can damage skin which can increase your risk of infection.
- If your health changes, or you develop a cough, cold, fever or any other illness within 1 week before your operation, call your orthopedic surgeon as soon as possible.
- If your Coach cannot come with you to the hospital, please inform the hospital if you need an interpreter
- All jewelry, piercings, nail polish, make-up and false nails (including body ornaments; religious or cultural items, barbells, captive bead rings, tongue rings etc.) must be removed before you arrive for surgery. If this is not done, your surgery could be cancelled.
- If you can't remove your jewelry yourself you must go to a jeweler and have it removed before your surgery.
 - Wearing jewelry during surgery can result in:
 - Burns from surgery equipment
 - Loss of circulation (fingers and toes)
 - A risk of swallowing or suffocation
 - Loss of jewelry or precious stones
 - Infections and contamination.

Pack a bag with the following

- Comfortable clothes
- Non-slip shoes with Velcro/sandals with back support
- Toiletries (soap, toothbrush, toothpaste, tissues, comb/brush)
- Container for your dentures (if needed)
- Contact lens holder (if needed)

Label all of your belongings

- Do not bring valuables to the hospital. CMH is not responsible for any lost valuables (jewelry, money, etc.)
- Plan for someone to drive you to and from the hospital
- Arrange for someone to care for your pets

MORNING OF THE SURGERY

- Plan to arrive at the hospital 2 hours before the time of your surgery
- Take a shower with the Chlorhexidine Soap (2% or 4% solution) that was given to you at your Preoperative Clinic appointment.
- **The shower can be done on the evening before your surgery or the morning of your surgery.**
 - Do not use the Chlorhexidine Soap on your face or near your eyes and ears
 - Do not use the Chlorhexidine Soap if you are allergic to it
 - If you develop a rash while using the Chlorhexidine Soap, stop using it and notify the hospital staff when you come in for your surgery the next day.
- Do not remove hair from the area of your body where the surgery will take place for one week before your surgery. Removing hair can damage skin which can increase your risk of infection.
- Do not use any body lotion
- Avoid using perfumes, deodorants, shaving creams or shaving lotions
- Brush your teeth. Rinse but do not swallow any water
- Do not chew gum or have any hard candies/breath mints
- Remove all make-up and nail polish
- Wear loose fitting clothing that can be easily removed (avoid back zippers and pantyhose)
- All jewelry, piercings, nail polish, make-up and false nails (including body ornaments; religious or cultural items, barbells, captive bead rings, tongue rings etc.) must be removed before you arrive for surgery. If this is not done, your surgery could be cancelled.
- Leave all valuables at home

WHAT TO BRING THE DAY OF SURGERY

- Your Coach (if your Coach is not available and you need an interpreter, please notify the hospital ahead of time)
- Your Health Card
- Your bag with clothes and toiletries
- All of your prescription medications (including inhalers, eye drops, medicinal creams, etc.) unless otherwise specified
- Your CPAP machine, if you use one to sleep
- This guide

ARRIVING AT THE HOSPITAL ON THE DAY OF SURGERY

- Go to the Central Registration Desk (located on the Main Floor-Level 1)
- Once you are registered, you will be directed to Surgical Day Care (located on the Main Floor-Level 1)

WHAT TO EXPECT BEFORE GOING TO THE OPERATING ROOM

- An identification bracelet will be placed on your wrist
- You will be asked to change into a hospital gown and to remove your underwear and bra
- Recheck all of your medical records
- Check your vital signs (e.g. heart rate, temperature, blood pressure)
- Ask you to remove your dentures and contact lenses
- Ask you to use the washroom to empty your bladder
- An intravenous line may be put into your arm now or once you get into the Operating Room
- You will be taken into the Operating Room

INSTRUCTIONS FOR MY COACH

- Coaches may wait in the Surgical Day Care waiting room. If you would like your surgeon to speak to your coach/family member after your surgery, please supply a name and phone number where they can be reached following the surgery. If time permits, your surgeon will try to contact this person.
- Our electronic tracking board will tell you when the patient's surgery is done and in the Post Anesthesia Care Unit (PACU)
- You will be able to see the patient in approximately 5 hours, when they are discharged from the PACU

WHAT TO EXPECT AFTER SURGERY

- You will be taken to the PACU when your surgery is complete
- Nurses will check your blood pressure, heart rate and breathing
- Nurses will give you medications for pain if you need them
- Nurses will check your bandages for signs of bleeding
- Nurses will encourage you to take deep breaths, to cough, and to move your ankles and feet
- You will be ready to be moved to Surgical Day Care or your room on the Inpatient Surgery Floor after a few hours
- Your Coach can see you in Surgical Day Care or your room on the Inpatient Surgery Unit

STEP 5 My Hospital Stay

PAIN CONTROL AFTER SURGERY

Good pain control is important for a successful recovery. You will be asked to rate your pain using a pain scale. A pain scale helps us to make decisions on how to relieve your pain. You will be asked by staff to rate your pain on a scale of 0 to 10. 0 is no pain, and 10 is the worst pain you have ever experienced. We encourage you to try and keep your pain level at less than 5.

We will use different types of medication and methods to control your pain, including oral pain medication and patient-controlled analgesia.

Oral Pain Medication:

Several different types of pain pills/tablets will be offered to you starting on the day of your surgery. Some may be long-acting pain pills, and some will be short-acting pain pills. If the medication does not control your pain, please tell your nurse. Your nurse can then contact the Acute Pain Service (APS) who will make changes to your pain medications to improve your pain relief.

Patient-Controlled Analgesia (PCA):

In this form of analgesia, a special pump is used to give you pain medication through your intravenous (IV).

This form of pain management will only be used if we cannot control your pain with oral medication. This is rare, and most patients are very successful on a combination of oral medications..

With the PCA pump, a small amount of pain medication is injected into your IV when you push a button. It is important that only you push the button for the pain medicine and no one else! You are the best person to determine how much pain control you need.

WHAT TO EXPECT WHILE IN THE HOSPITAL

- After your surgery you may feel groggy for the rest of the day
- You may have a mild sore throat and feelings of nausea
- Vomiting may be a side effect from your anesthesia and/or your pain medication. On occasion, this can last for several days
- You will have bandages on your shoulder after surgery. You will have a sling on to immobilize your shoulder. This is a normal part of recovering from this type of surgery
- You may have oxygen tubing in your nose. This is because you do not tend to breathe as deeply when you are groggy/sleepy. The tubes will be removed as you become more alert
- We will ask you to rate your pain from 0 to 10, and will work with you to keep your pain less than a 5 (out of 10) on the pain scale
- We will check your vital signs (blood pressure, heart rate, temperature) and circulation in your legs often
- We will encourage you to take deep breaths and cough every hour that you are awake
- You can eat and drink fluids
- We will teach you how to turn safely in bed. Turning in bed helps to prevent skin breakdown (bed sores), lung congestion and blood clots from forming
- You may receive fluids and antibiotics via an intravenous initially (tube in your vein)

EXERCISES AND ACTIVITIES AFTER SURGERY

Deep Breathing:

- Breathe in deeply through your nose
- Hold your breath while you count from 1-2
- Breathe out slowly through your mouth
- Repeat 1-2 times every hour

Coughing:

- Breathe in deeply through your nose
- Cough forcefully from your abdomen
- Repeat 5 times every hour

Deep breathing and coughing helps to prevent congestion in your lungs

Calf Pumping Exercises

- Lie on your back or in a sitting position
- Move your feet up and down
- Repeat 10 times every hour

STEP 6 Going Home

You can expect to go home on the day of your surgery, or the day after your surgery. Your surgeon will decide when you are ready for discharge.

Discharge Instructions

If you have any of the following signs and symptoms, go to your nearest Emergency Department or call 9-1-1.

- Shortness of breath, or difficulty breathing
- Excessive bleeding at your incision site
- Chest pain, chest tightness, or chest pressure

Contact your surgeon if you have any of the following:

- Excessive bleeding at your incision site
- Moderate to large amounts of drainage at the incision site for more than a few days
- A foul odor or yellow or green drainage at the incision site
- An increase in your temperature (more than 38° C)
- A sudden, severe increase in pain not relieved with pain medication

Pain and Swelling

Some pain and swelling at the surgical site is normal. This will improve over the next 6 weeks, but swelling may increase even after leaving the hospital. Use your pain medication as prescribed. You can use ice packs to control pain and inflammation. Apply an ice pack to your shoulder for 15 minutes at a time, and then remove. Wait at least 1 hour between applications.

It is normal to have some numbness around the area of the surgical incision. This may improve with time.

Sling

You must wear a sling for protection for 6 weeks after surgery.

To apply a sling correctly, first bend your operated elbow to 90 degrees. With your non-operated hand, pull the sling over the operated elbow, which must fit snugly into the corner at the back of the sling. At this point, the sling should also cover most of your operated hand. Next, run the strap over your neck, loop it through the hole in the sling near your operated hand and back to it. Tighten any slack in the strap so that the sling provides gentle upward support for your operated arm when you are standing upright.



There are a variety of slings your surgeon could recommend, depending on the type of surgery performed. These slings are not covered by the Ontario Health Insurance Plan (OHIP) and you are responsible to cover the cost of the sling. Prices range from approximately \$20.00 to \$150.00 (subject to change). Most extended health benefits may reimburse you for some or all of the cost associated with your sling. Please review this with your surgeon/benefit carrier.

Expect to wear your sling for approximately six weeks, as directed by your surgeon. During this time, you will not be allowed to drive which will require you to make alternate arrangements for transportation. It's vital that you do not move your shoulder so the sutures can heal properly. Please clarify with your surgeon which tasks/exercises can be performed with your sling off. Following surgery, you can use the hand on your operated side to perform light activities (do not lift more than one lb). You will need to avoid weight bearing pushing/pulling.

Bandage/Dressing

You will have a bulky pressure dressing on your shoulder immediately after surgery. This bandage can be removed the day after surgery. If there is no drainage from your incision site, then no further bandage is needed and you can leave your wound open to the air. If there is drainage from the incision site, or if the stitches/staples catch on your clothing, you may can cover your wound with a simple adhesive bandage.

The stitches/staples should be removed between 10 and 14 days after surgery. This may be done by your family physician.

If your incision is draining and/or leaking for more than 4 days after you leave the hospital, call your surgeon.

If your dressing is leaking, it should be removed. To remove your dressing, follow these steps.

- Wash and dry your hands
- Press down on the skin with one hand and carefully lift an edge of the dressing with your other hand
- Stretch the dressing down and out (not up and out) to break the adhesive seal
- Slowly work your way around the dressing, repeating the above steps, until the dressing is loose and can be removed
- Observe the incision site for any signs of infection
- Gently clean around the incision site with soap and warm water, if needed
- Apply a clean, dry dressing similar to the one provided when you left the hospital. When the wound is dry you do not have to cover the wound.

Signs of infection are:

- Redness
- Drainage
- Odor from the incision site
- Excessive swelling around the incision
- Fever of 38°C or higher
- Increased pain in the shoulder joint that was operated on

Dental Precautions

Let your dentist know that you have had a shoulder replacement. You will require antibiotics before and after any dental procedures, including teeth cleaning.

Bacteria can go from your mouth, into your bloodstream and then into your shoulder, which can then cause an infection. Improving and maintaining good oral hygiene can help reduce bacteria.

Remember: No dental work for 4 weeks before surgery and/or 6 months after surgery (unless it is an emergency).

Other Medical Procedures

You should not have any invasive medical procedures for 3 months following your shoulder surgery (unless an emergency).

Bathing and Showering

You can take a shower. Your dressing is waterproof. However, do not take a bath or go into a pool/hot tub until your incision is fully healed.

A walk-in shower, shower chair and/or grab bar may be helpful. Showering while sitting on a bath bench in the tub is another option. Consider use of a long handled sponge to wash your feet and lower legs.

Incision

After the waterproof dressing is removed and your incision is dry, it can be left open to air. You should not shower without any dressing on the wound.

Bruising

Bruising is common, especially when there is no drainage from the incision. Often, the bruising can take up to a week to fully come to the surface of the skin. The bruising will go away gradually.

Sleeping

If you have been instructed to wear a sling for protection, it should also be worn at night. You should sleep on your back (preferably) or your non-operated side. When sleeping on your back, place a pillow under your arm and elbow to support it. When sleeping on your non-operated side, place a pillow across your chest to support your operated arm.

General Advice

It is normal to feel tired and to have a poor appetite after surgery. This will last for 4 to 6 weeks. You may also experience constipation from your pain medication. Drink plenty of water, eat fruits and vegetables and add fiber to your diet to give you energy and prevent constipation. You can take a stool softener/gentle laxative such as Senekot-S® regularly to ensure a bowel movement every 1-2 days, if needed. You can gradually reduce the amount of laxative you are taking as you use less pain medication.

RETURNING TO NORMAL ACTIVITY

Healing after surgery takes several months and too much activity, too early, can interfere with the healing process.

While your shoulder arthritis was developing, you were gradually losing range of movement and muscle tone. This often affects your tolerance to exercise, endurance, walking, and balance. Regaining those functions often takes longer than you and your family expect.

Follow the directions that your surgeon gave you, before you had surgery. If you have questions, or are unsure of some of the directions, speak with your surgeon at your first follow-up visit.

RESUMING ACTIVITIES AFTER SURGERY

Returning to Work

You and your surgeon should have already discussed your expected return to work date. You can discuss this again at your first post-operative follow-up visit,

Leisure and Sport Activities

Forceful overhead, repetitive or contact sports and activities are restricted permanently.

Speak with your surgeon about when it is safe to start your leisure activities.

Travel

Security alarms may be set off by your shoulder components. A letter from your surgeon will not excuse you from security precautions at any airport. If travelling out of the country, be aware that travel medical insurance may not cover problems related to this surgery. Verify when buying travel medical coverage whether they will cover problems related to this surgery or not.

Congratulations on your new shoulder! Although there is much work to do, we have already done a lot together. When you get home, take a deep breath and relax.

STEP 7 My Care after Shoulder Replacement Surgery

The benefits of shoulder replacement surgery are great, and will be achieved with your time and effort.

Keep this guide handy to help you follow your exercise routine. Do your exercises 2 to 3 times a day. The exercises will become easier as you become stronger. You will be given exercise progressions by the physiotherapist following you in the community. Remember to take your pain medications to keep your pain under control.

It is important to keep active after shoulder replacement surgery. This will keep you strong and moving well. Balance your activity and exercise with periods of rest. Gradually increase your activity, like walking and household chores. Always be mindful of shoulder precautions and how they affect your activity and exercise.

PHYSIOTHERAPY

There are several OHIP covered physiotherapy clinics located across the province. You should make arrangements with one of these clinics for your post-operative shoulder therapy BEFORE you have your surgery. You should schedule your first appointment with your physiotherapy clinic for 2-3 weeks after your day of surgery.

Private physiotherapy clinics who rarely see total joint replacement patients may not know the correct protocols for your therapy. Please check with them before booking an appointment if you are choosing this option.

FOLLOW-UP CARE

Your first follow-up visit with your surgeon will be approximately 2 to 3 weeks after your surgery. You will be seen in the Fracture Clinic at CMH, which is located on Main Floor, Level 1. You will be given a date and time for this appointment before you go home from hospital. If you were not given a follow-up appointment when you were discharged from hospital, the Fracture Clinic will call you with one.

If you are having any concerns or complications, you may be seen earlier than these scheduled times. Please call your surgeon's office to arrange for an earlier appointment, if you have any concerns.

Total Shoulder Arthroplasty Rehabilitation Protocol

The following is a rehabilitation protocol which has been designed to provide you and your physiotherapist with guidelines and basic instructions to help restore your shoulder's range of motion and strength. This protocol is a general guideline. There may be variations specific to each patient. Please refer to the Surgeon and the Physiotherapy referral for any variations in the protocol. Your physiotherapist may decide to slightly change or add to the protocol to address your specific needs while still achieving the same overall goals.

There are 4 phases to the rehabilitation protocol.

Phase I (Protection): 0-2 weeks after Surgery

You are allowed to do light and non-repetitive activities of daily living using your operated hand in front of your body, while keeping your upper arm close to your side. No external rotation beyond 30 degrees, extension, or resisted internal rotation is allowed for the first 6 weeks after surgery.

You should remove your sling often to perform these motion exercises:

Neck, Elbow, Wrist and Hand:

These exercises help to regain and maintain full mobility of your neck and the joints below the operated shoulder.

Pendulums:

These exercises involve a gentle circular movement of the operated arm while bending forward at the waist to let gravity assist in the motion.

Active Assisted Range of Motion:

These exercises involve using the non-operated arm to help move the operated arm and prevent shoulder stiffness. Movements should be done gently and with minimal pain.

Phase II (Controlled Motion): 2-6 Weeks after Surgery

You may begin the following shoulder exercises.

Active Range of Motion:

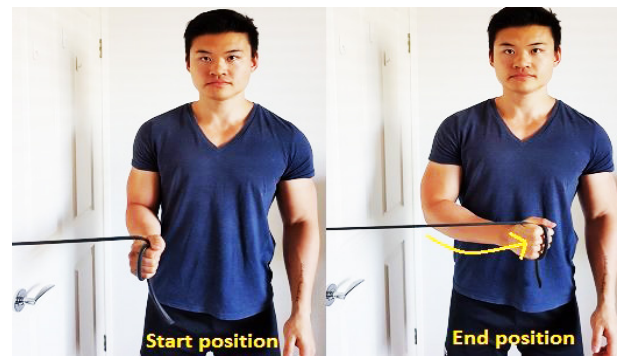
These exercises involve moving the operated arm without help from the operated arm. Movements should be done gently and with minimal pain.

Phase III (Progressive Motion): 6-8 Weeks after Surgery

You may discontinue use of your sling. You may begin the following shoulder exercises.

Isometric Strengthening:

These exercises are gentle contractions of the shoulder muscles without actual movement of the shoulder to prevent muscle atrophy. **No resisted internal rotation is allowed for 6 weeks after surgery.** (See Figure 1)



(Figure 1)

End Range Passive Range of Motion:

These exercises involve your therapist stretching the operated arm to improve end range of motion. The force should be gentle and cause minimal pain.

Phase IV (Strengthening and Function): 8-12 Weeks after Surgery

You may begin the following shoulder exercises.

Dynamic Strengthening:

These exercises involve moving your shoulder against resistance to build muscle strength and endurance

Functional Exercises:

These exercises may be added to the protocol by your therapist to incorporate your specific work and/or sport functional demands.

Exercise Guide for Total Shoulder Arthroplasty Rehabilitation Protocol

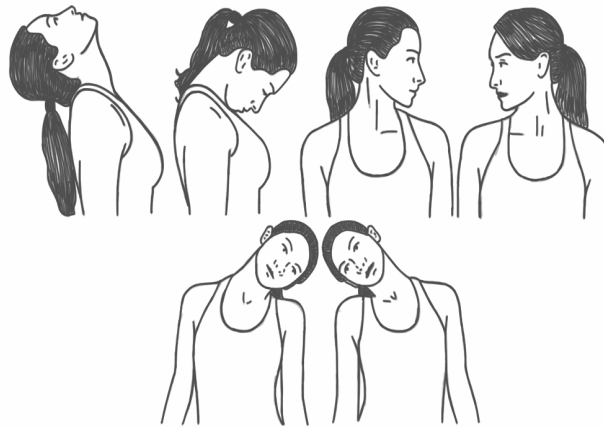
Phase I (Protection): 0-2 Weeks after Surgery

Perform the 5 exercises in this Phase for the next 3 weeks.

Exercises should be done 3 times a day with your sling removed, and your elbow at your side.

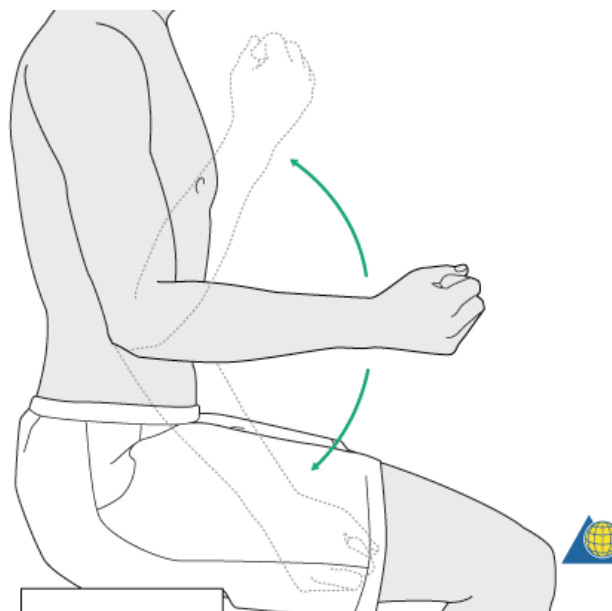
1. Neck:

Start with your chin tucked down. Move your head forward and back, then return to the starting position. Turn your head from side to side. Tilt your head from side to side. Repeat each



2. Elbow:

In a sitting or standing position, gently bend and straighten your elbow fully. Repeat 10-20 times.



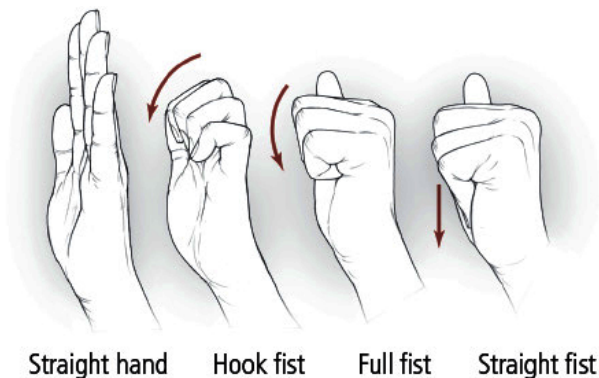
3. Wrist:

Support your forearm on a table or the arm of a chair. Bend your wrist up and down, then side to side. Repeat each movement 10-20 times.



4. Hand:

In a sitting or standing position, gently bend and straighten your elbow fully. Repeat 10-20 times.



POWER GRIP

Squeeze the ball with your fingers and thumb

5. Pendulums:

Bend forward and support your non-operated arm. Relax your operated shoulder and arm. Gently move your arm in a circular motion. Do this in both the clockwise and counter-clockwise directions. You may gradually make bigger circles as you recover, but increase the size of the circles only if there is minimal pain. Repeat 10-20 circles in each direction.

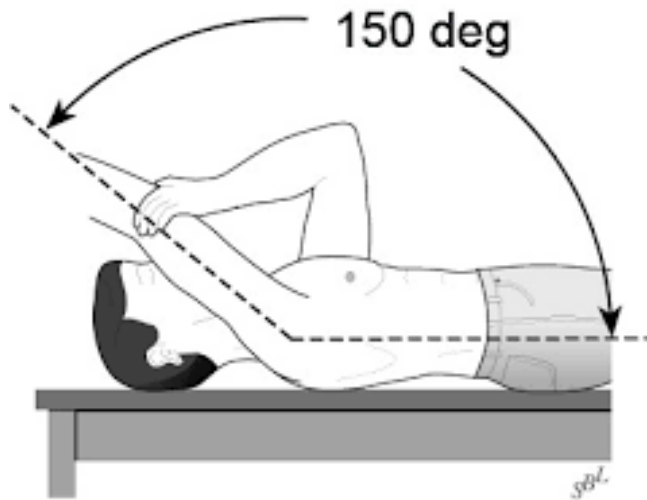


Active Assisted Range of Motion:

These exercises involve using your unaffected arm to assist in moving your operated arm. Do not attempt to move your operated arm by itself.

1. Forward Elevation:

Use the force of your operated arm with the help of your non-operated arm to gently lift your operated arm forward. This exercise may be performed standing, sitting or lying down. Hold at the top for 5 seconds, and then return to the starting position. Repeat the movement 10-20 times.



2. External Rotation:

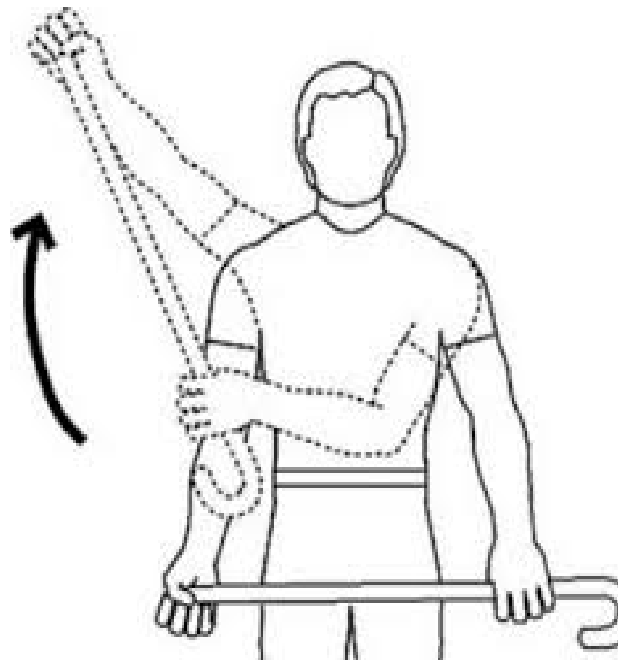
Use the force of your operated arm with the help of your non-operated arm, or a stick or cane, to gently turn your operated arm away from your body, keeping your elbow at your side. Do not force the arm past 30 degrees of external rotation. Hold at the end of the range for 5 seconds. Repeat the movement 10-20 times.



Matsen Fig. 2-34

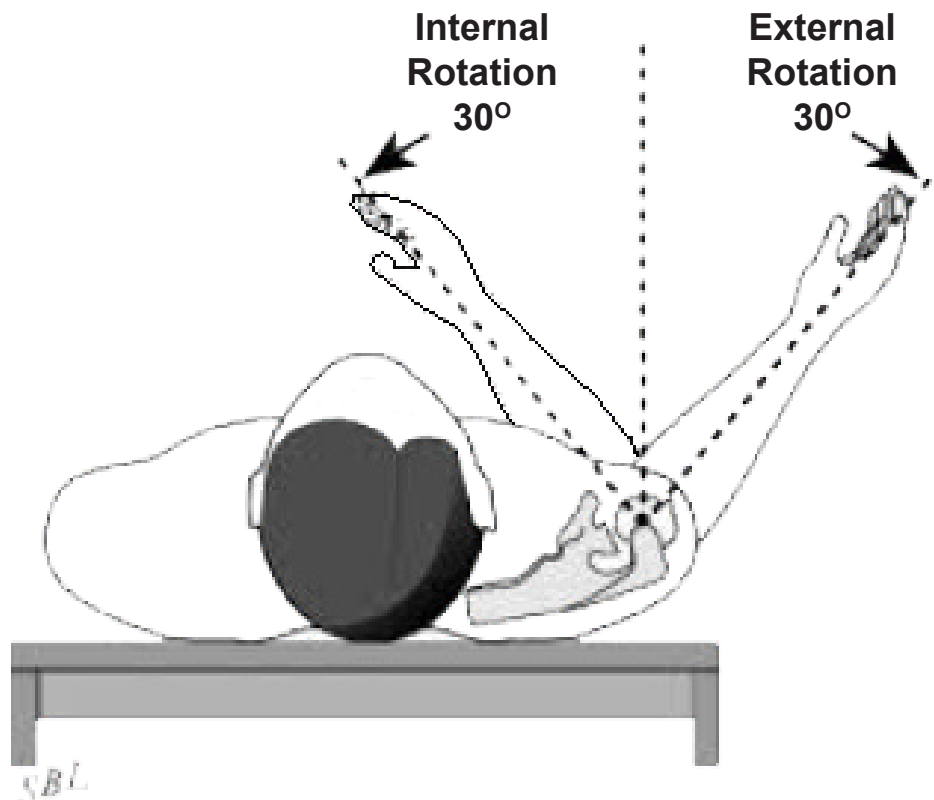
3. Abduction:

Use the force of your operated arm with the help of your non-operated arm, and/or a stick, to gently raise your operated arm to the side, away from your body. Hold each time for 5 seconds. Repeat the movement 10-20 times.



Phase II (Controlled Motion): 2-6 Weeks after Surgery

Exercises in this Phase should be done 3 times a day. The force should be gentle and cause minimal pain. External rotation is restricted to 30°.

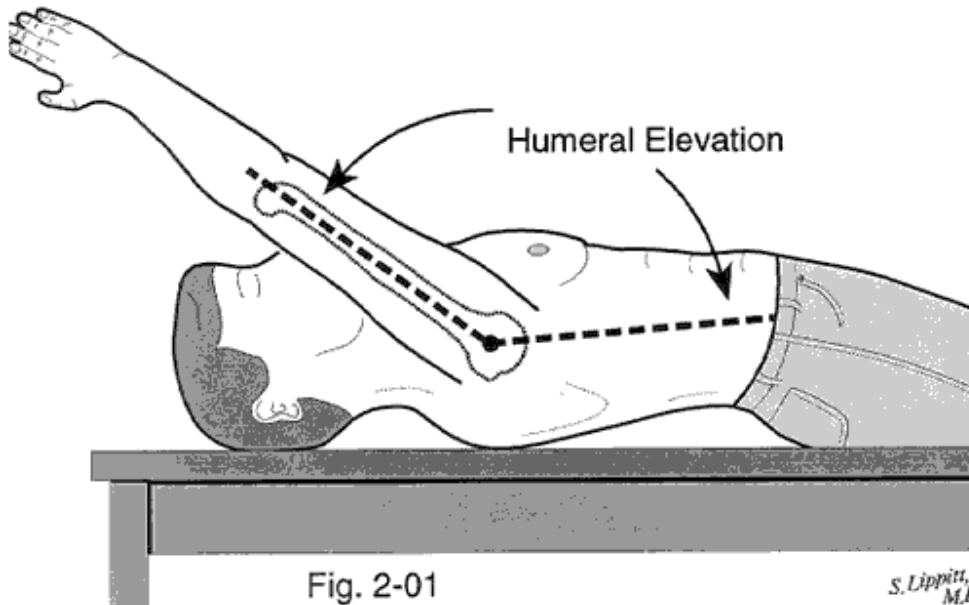


Active Range of Motion

These exercises involve moving the operated arm without assistance from the non-operated arm.

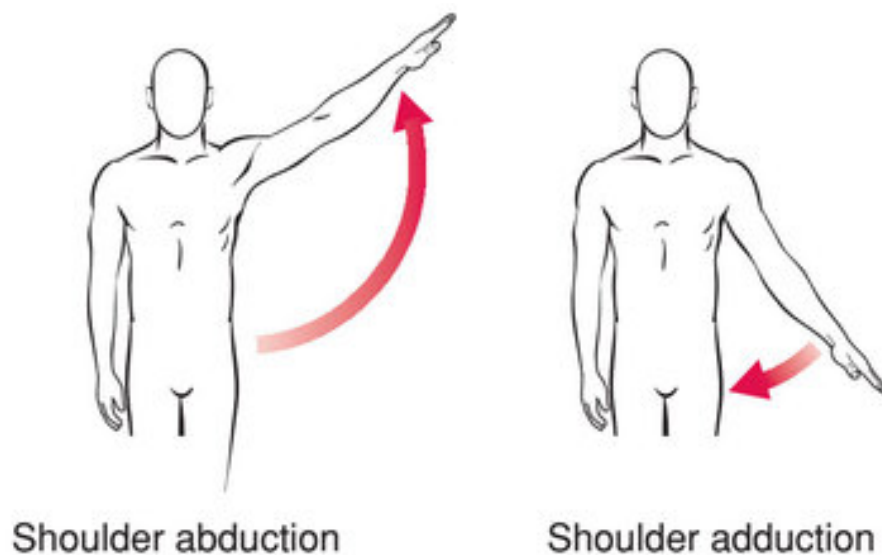
1. Forward Elevation:

Gently lift your operated arm forward. This exercise may be performed standing, sitting, or lying down. Hold each time for 5 seconds. Repeat the movement 10-20 times.



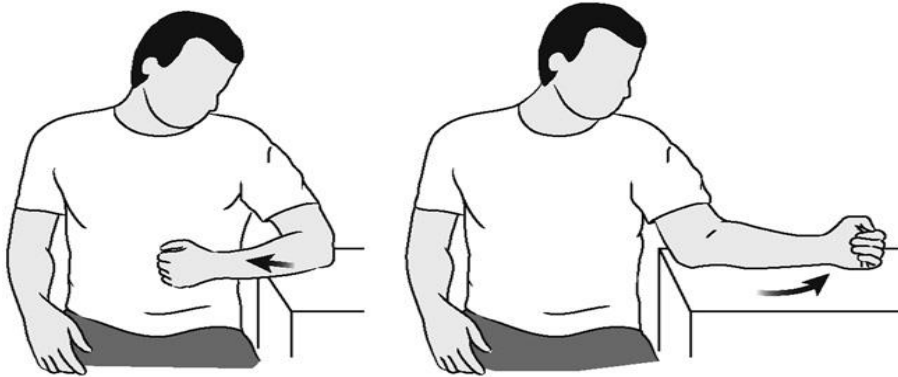
2. Abduction:

Gently lift your operated arm to the side. Hold each time for 5 seconds. Repeat the movement 10-20 times.



3. External Rotation:

Gently turn your operated arm away from your body. Do not force the arm past 30°. Hold each time for 5 seconds. Repeat the movement 10-20 times.



Phase III (Progressive Motion): 6-8 Weeks after Surgery

You may discontinue the use of your sling. Arm extension and internal rotation movements can begin now. Progress of external rotation beyond 30 degrees may also begin. Exercises in this phase should be done 3 times a day.

Active Range of Motion

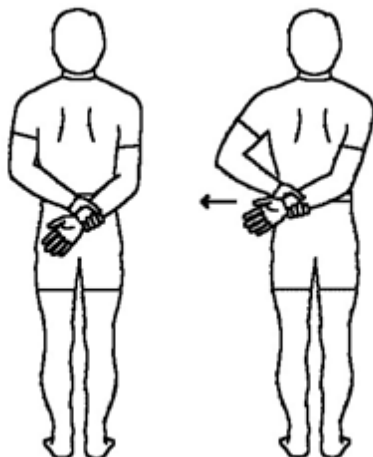
Continue to perform the first 3 Active Range of Motion exercises in Phase II.

1. Forward Elevation
2. Abduction
3. External Rotation

In addition, perform the internal rotation exercise below.

4. Internal Rotation with Hand Behind Back

Gently turn your operated arm inward and behind your back. Hold for 5 seconds, and then return to starting position. Repeat the movement 10-20 times.

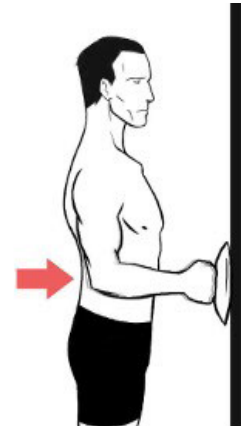


Isometric Strengthening

These exercises are gentle contractions of the shoulder muscles without actual movement of the shoulder to prevent muscle atrophy. No resisted internal rotation is allowed for 6 weeks after surgery.

1. Forward Elevation:

Keeping your elbow at your side, close your hand into a fist and push it against a door or wall. Hold for 5 seconds. Repeat each contraction 10-20 times.



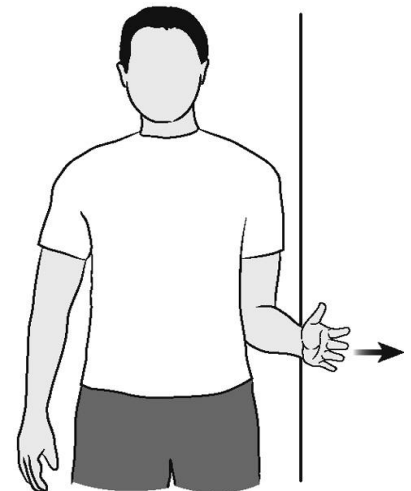
2. External Rotation:

Keeping your elbow at your side, close your hand into a fist and push it forward against a door or wall. Hold for 5 seconds. Repeat each contraction 10-20 times.



3. Abduction:

Keeping your elbow at your side, push the side of your elbow against a door or wall. Hold for 5 seconds. Repeat each contraction 10-20 times.



End Range Passive Range of Motion

Follow the same instructions as for the Active Range of Motion Exercises, but the force applied will be assisted at the end-range in a controlled fashion by your therapist.

Phase IV (Strengthening & Function)

Exercises in this Phase should be done 3 times a day.

Dynamic Strengthening

The resistance (elastic bands or weights) should begin very low and gradually progress, as tolerated.

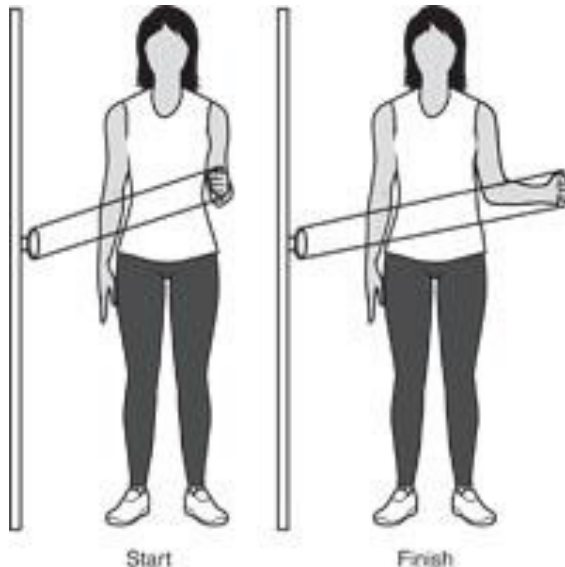
1. Forward Elevation in the Scapular Plane:

Lift your operated arm to shoulder level against resistance. Keep the plane of your arm movement about 30 degrees in front of the plane of your body. Keep your thumb facing upward during the movement and concentrate on keeping your shoulders down. Hold for 5 seconds, then slowly lower. Repeat the movement 10-20 times.



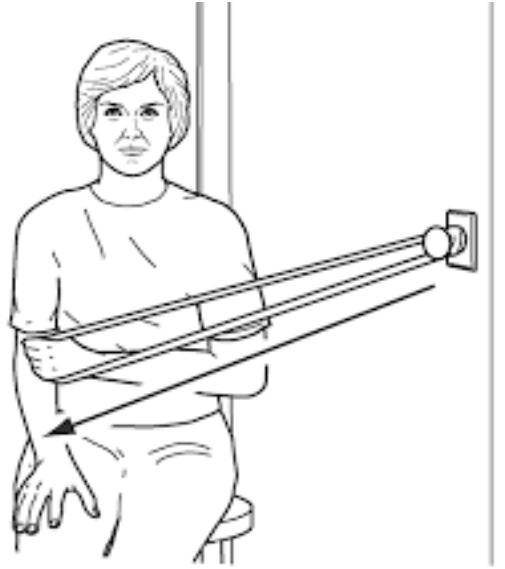
2. External Rotation

Keep your elbow at your side and flexed to 90 degrees. Rotate your arm outward against resistance. Hold for 5 seconds, then slowly lower. Repeat the movement 10-20 times.



3. Internal Rotation:

Keep your elbow at your side and flexed to 90 degrees. Rotate your arm inward against resistance. Hold for 5 seconds, then slowly lower. Repeat the movement 10-20 times.



4. Seated Row:

Pull your arms backward against resistance while concentrating on keeping your shoulders down and squeezing your shoulder blades together. Hold for 5 seconds. Repeat the movement 10-20 times.



Functional Exercises

These exercises may be added to the protocol by your therapist to incorporate your specific work and/or sport functional demands.

Resources

Arthritis Society: www.arthritis.ca or www.myjointreplacement.ca or
1-800-321-1433

Cambridge Memorial Hospital www.cmh.org

Canadian Orthopaedic Foundation: whenithurtstomove.org or 1-800-461-3639

Community Care Access Center: healthcareathome.ca

Community Resources: www.healthline.ca

OHIP-Covered Physiotherapy Clinics: www.collegept.org or 1-800-583-5885

Ontario Retirement Home Directory: Ontario.senioropolis.com

Ortho Connect: www.orthoconnect.org

Ontario Physiotherapy Association: www.opa.on.ca or 1-416-322-6866

WWLHIN www.waterloowellingtonWWLHIN.on.ca

Important Phone Numbers

Cambridge Memorial Hospital:

Day Surgery: 519-621-2330 Ext. 2205

Pre Surgical Clinic: 519-621-2330 Ext. 2205

WWLHIN KW/Cambridge 519-748-2222

Device and Equipment Vendors

Disclaimer: The listed services are not endorsed by Cambridge Memorial Hospital. This list does not claim to be exhaustive and some facilities/resources may have been inadvertently missed.

Preston Medical Pharmacy M-F 9-6, Sat 9-2
519-653-1994 125 Waterloo Street South, Cambridge
www.prestonmed.ca

Shoppers Home Health Care
1-800-746-7737 Multiple locations across Canada
www.shoppershomehealthcare.ca

