A PATIENT'S GUIDE TO SHOULDER REPLACEMENT SURGERY AT ST. JOSEPH'S HOSPITAL







Remember to bring this booklet with you on the day of your surgery



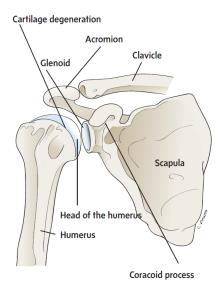


UNDERSTANDING SHOULDER REPLACEMENT

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 saucershaped 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.



Shoulder 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 arm bone (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.

TYPES OF SHOULDER REPLACEMENTS

The primary goal of shoulder replacement 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. There are two main types of shoulder replacements:

Anatomic shoulder arthroplasty (replacement) – A metal stem is placed into the humerus bone of the arm. This type of replacement mimics the normal shape of the shoulder and has a rounded ball that is attached to the stem. A plastic shell forms the other side of the joint and is attached to the glenoid (part of the shoulder blade). The plastic shell is curved to fit the rounded metal humerus piece.

Reverse shoulder arthroplasty (replacement) – Reverse shoulder arthroplasty is mainly used in patients who have severe rotator cuff weakness or degeneration, severe trauma or require revision surgery. This surgery is needed when 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. Next, a metal plate is secured with screws into the glenoid (shoulder blade) and is covered with a ball.

POSSIBLE COMPLICATIONS OF SURGERY:

Dislocation/instability

Stability of the shoulder relies on the rotator cuff muscles and ligaments to help hold it in the right position. After surgery the shoulder can move "out of joint". The chance of dislocation or instability with a reverse total shoulder arthroplasty is less than six per cent and one per cent with standard total shoulder replacement.

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 (i.e. sinus, chest, dental, skin). Any infections can settle in your new shoulder and become a serious complication. Seek treatment quickly for any type of infection. If you are having a urologic procedure (e.g. kidney stone operation or lithotripsy), bowel surgery or colonoscopy you MAY need antibiotics. Speak with your surgeon. Rheumatoid arthritis or immunocompromised patients should always receive antibiotics with procedures.

Loosening of the Shoulder Implant

Over time implanted pieces may loosen from the bone which can cause reduced function, pain or instability and possibly the need for 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 happen less than one per cent of the time. 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.

THINGS TO DO BEFORE YOUR SURGERY

Healthy Diet: If possible, prepare meals ahead of time and portion them into separate containers with easy to remove lids. Stock your freezer with frozen meals and buy precut vegetables. Arrange your cupboards so that frequently used items are at waist level and easy to reach. It's unsafe to climb on stools to reach for items from high places. You may also want to consider using a meal provider such as Meals on Wheels and grocery delivery services. A balanced and nutritious diet can promote healing after your surgery. You may want to seek diet advice from your family medicine health team.

Tobacco: Tobacco use is associated with slower wound healing. Discussing ways to quit smoking with your family health team is valuable for your general health and for your shoulder surgery recovery.

Skin Cleansing: Reducing the risk of infection is important. We do this by cleansing your skin immediately before your surgery and by giving you antibiotics while you are in the hospital. Another strategy to reduce infection is to cleanse the skin in the front of your shoulder and in your armpit for five days before to your surgery with benzoyl peroxide. Your surgeon may discuss this with you before your surgery.

Clothing: It is hard to put on clothes after your shoulder surgery. Loose fitting shirts and pants will make this task easier.

Delegate: You may have to rely on family members, friends or neighbours to assist you with certain home management tasks. Cleaning your home, cutting your grass, doing your laundry and getting groceries prior to surgery is recommended.

THINGS TO DO AFTER YOUR SURGERY

Discharge Planning

Most patients are discharged home one to two days after surgery. While you are in hospital, referrals may be made to community agencies and the Home and Community Care Support Services. They will discuss available supports for your ongoing care needs after you are discharged. If you do not feel you will be able to return home, alternate care arrangements must be made for you before you are admitted. A social worker can assist with plans for alternative accommodation upon discharge and can explain your options and any costs involved. If you would like to talk to a social worker about your options for alternative accommodation, please let your pre-surgical screening nurse know.

Patients are expected to attend outpatient physiotherapy after they are discharged from hospital. If you have made alternate accommodations, your therapist may refer follow up therapy to where you are staying.

Recovery in Hospital

- A nurse will assist with your diet, pain management and wound care.
- A physiotherapist will review exercises with you and explain what movements and activity you should and should not do.
- You may be up and walking and will return to a normal diet.
- An occupational therapist will provide you with information on how to complete daily tasks such as dressing and bathing (see Tips to Help you Manage at Home).

During your recovery, your care team will finalize your discharge plan and you will be discharged to go home when it is safe to do so. **All patients should expect to make plans to arrange as much support possible independently PRIOR to surgery**. Home and Community Care Support Services will be determined by your needs post-surgery and by where you live.

Pain Management

- Pain is normal following surgery and can be managed well with medications.
- Taking your pain pills regularly for the first few days after surgery will control your pain more effectively.
- Take your pain pills 30 minutes before exercising and follow physiotherapy instruction for using ice on your shoulder.
- Take pain pills before coming for therapy or clinic visits and bring extra with you.
- Pain medication prescriptions cannot be renewed after 3 pm. If you think you will run out of pain medication, please contact your surgeon's office between 9 am and 3 pm.

Physiotherapy Exercises After Surgery

You will be taught exercises by a St. Joseph's physiotherapist after your surgery depending on your surgeon's orders. After you are discharged, you will also require follow up physiotherapy. Contact the physiotherapy clinic of your choice to arrange your follow-up therapy. We suggest you do this before your surgery.

A physiotherapy referral will be provided that describes exercises that are permitted after surgery. Ensure you bring your physiotherapy referral to your first visit. You may request your hospital therapist to fax a referral to the clinic of your choice.

ONLY DO EXERCISES SHOWN TO YOU BY YOUR PHYSIOTHERAPIST

Shoulder slings

After surgery you will be required to wear a sling to stop your shoulder from moving **FOR UP TO 6 WEEKS**. There are a variety of slings your surgeon may recommend, depending on the type of surgery you had. Shoulder 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 insurance may reimburse you for some or all of the cost associated with your sling. Please review this with your surgeon/benefit carrier.

Precautions

Expect to wear your sling for approximately six weeks, as directed by your surgeon. During this time, you will not be allowed to drive. Please make alternate arrangements for transportation. It's vital that you minimize shoulder movement so the wound can heal properly. Following surgery, you may be able to use the hand on your operated side to perform light activities such as feeding, dressing, showering and performing personal hygiene (do not lift more than one pound). Avoid weight bearing pushing/pulling. Please talk to your surgeon/therapist about what tasks/exercises can be performed with your sling off.

Care of the Surgical Site

- You may have clear, yellowish or reddish drainage on your dressing.
- Change the dressing 48 hours after you leave the hospital and every 48 hours after that.
- Use "occlusive" style dressings bought from your pharmacy. This type of dressing has a plastic film covering that can get wet in the shower. If the inside of the dressing becomes wet, it should be changed daily. Here is an example of an occlusive dressing:



- If you are unable to find an occlusive dressing, cover the incision with gauze and tape until the wound is dry.
- Facecloth washing is recommended until you are allowed or instructed to remove sling for shoulder exercises.
- Do not go swimming or soak in a bath or hot tub until instructed by your therapist or surgeon.
- Staples or stitches will be removed in approximately two weeks at your follow up appointment.
- Do not apply any creams, lotions or powders on the incision.

Activity

- **Do Not** (until told otherwise by your surgeon or therapist):
 - Lift or carry anything heavier than 1 pound with your arm that has been operated on.
 - Push or pull anything including opening and closing doors.
 - Actively lift your arm away from your body.
- Wear your sling at all times except when doing your exercises or washing/getting dressed (as instructed by your therapist).
- Initially, you will not be able to wash your hair unless you have help because you
 are unable to lift your arm above your head. You may go to the
 hairdresser/barber. Please ensure that any body positions required to
 address hair care do not compromise your shoulder restrictions.
- Ask your surgeon when you can return to work and drive.
- Sleeping in a reclining chair may be the most comfortable position initially when
 you first return home. If sleeping in a bed, make sure that you sleep on the
 appropriate side so that you are able to get up without having to roll onto your
 operative side. In a bed, you may need many pillows to support yourself and
 make it easier to get up. You will practice with the therapist before discharge.

Exercises and Activities of Daily Living

Until directed by your surgeon, it is essential that you do not move your operated shoulder while performing daily living tasks. Moving your hand and wrist while in the shoulder sling will help with circulation. Dressing the upper body and washing on your non-operated side may pose a challenge for some individuals. Your occupational therapist will talk about these challenges with you before you go home.

TIPS TO HELP YOU MANAGE AT HOME

Additional supports such as in-home therapy, nursing, personal support, etc. are

available; however, they are limited in supply and needs will be considered on an individual basis following your surgery.

Tips for Dressing

- You may choose to wear large, loose-fitting clothing that will fit over top of your sling.
- Some patients prefer to modify their clothing by cutting shirts up the side seam or along the shoulder and securing with velcro tabs, ties or safety pins to allow easier dressing and undressing.
- Avoid clothing with small buttons, hooks and zippers.
- Elastic waist pants, slip on shoes and elastic shoe laces can make getting dressed with one hand easier.
- You may benefit from the use of a long shoe horn or a dressing hook to help extend your reach when getting dressed.

Tips for Bathing and Toileting

- Use a face cloth to wash initially following surgery. Avoid getting the incision or sling wet.
- The length of time until you are allowed to shower is depends on your surgeon and restrictions. These will be reviewed with you by your therapist/surgeon prior to discharge.
- When permitted to shower, a second 'shower sling' will help stabilize your shoulder while showering. (Your therapist can discuss with you if you wish to purchase an extra sling, if recommended.)
- Wash using your non-operated while keeping your operated arm against the side
 of your body. If help is available, you should ask for help to clean under your
 operated arm. To do this, gradually feed a warm, soapy cloth into the armpit and
 grab it from the back. Clean the armpit using a back and forth motion, similar to
 dental floss. Ensure all soap residue is removed and dry thoroughly.
- Avoid the use of deodorants, lotions and sprays. Tuck a gauze pad or small cloth in the armpit to absorb sweat if needed.
- A bath chair/bench, non-slip bath mat, long-handled sponge, removable shower head and grab bar may be helpful.
- A raised toilet seat (without armrests) can be used to help you get on and off the toilet. You may also use a vanity or sturdy grab bar (with your non-operated side) for assistance.
- There are medical supply stores that can provide information on special equipment that can be rented or purchased for individuals with the use of one hand.

The illustrations below explain the steps to follow in **dressing ONLY** when the sling is allowed to be removed. Start by dressing the operated side first and undressing the operated side last.

1. Undo the thumb and forearm velcro straps.



2. Undo the shoulder strap from the front dring/clasp, keeping the strap secured in the second d-ring clasp.



3. Fold back the front panel to completely expose the forearm/elbow.



4. Straighten your arm and slowly slide the sleeve up the forearm and past the elbow. Do not lift the arm away from the pillow.



5. Pull the shirt up over your shoulder. Ensure your elbow is tucked back into the sling and reattach the straps for the shoulder, forearm and thumb.



6. Pull the shirt over head or around the neck in order to dress the non-operated side.



7. Briefly undo the shoulder and waist straps to slide the shift down under the pillow. Refasten all straps securely.



8. Perform these steps in the reverse order to undress the operated side.



How Long Does a Replacement Last?

It's important to remember an artificial joint is not as strong or durable as a natural joint. Over time, normal use will cause the artificial shoulder pieces (implants) to wear. How quickly the shoulder implants wear depends on: surgical placement, your age, activity level and general physical condition.

In patients under 65, 60 per cent of shoulder replacements continue to work well ten years after surgery. In patients over 65, 80 per cent of shoulder replacements may last more than ten years.

With proper care, shoulder replacements may last longer. Activities which place a lot of stress on the joint may reduce how long your artificial shoulder pieces will last. Activities to avoid include: repetitive lifting and "jamming" or "loading" movements such as boxing or using a hammer.

Follow up

- Keep your follow up appointment with your surgeon. If you do not receive an
 appointment or need to change it, please call the surgeon's office to make other
 arrangements.
- Prescriptions for pain medication will not be renewed after hours by telephone.
- If you have concerns about your prescriptions, please contact your surgeon between 8:00 am and 3:00 pm.
- For after-hours assistance between 3:00 pm and 8:00 am, please go to your local emergency room or urgent care centre. The physicians in the emergency room or urgent care will be able to contact your surgical team if there are urgent concerns.

WHEN TO CALL

St. Joseph's Hospital 519 646-6100

Contact the surgeon's office or if calling after-hours, contact your local emergency or urgent care centre if you experience any of the following:

- Increased incision redness, drainage or opening of skin edges
- Temperature over 38.5C

Call 911 or go directly to your nearest emergency department if you experience any of the following:

- Chest pain or tightness
- Shortness of breath
- Pain or swelling in your calf or thigh

The Roth McFarlane Hand and Upper Limb Centre at St. Joseph's Hospital is a world renowned centre specializing in the diagnosis, care and treatment of patients with complex conditions affecting the upper extremities including hands, wrists, elbows and shoulders.

The centre staff and physicians perform 40,000 clinic visits, 14,000 therapy visits and 6,000 surgical procedures each year in state-of-the-art operating rooms and clinic space. Roth McFarlane is the largest centre of its kind in Canada and in collaboration with Lawson Health Research Institute and Western University Canada, has earned an unparalleled reputation for its achievements in education and research.

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