

A PATIENT'S GUIDE TO SHOULDER REPLACEMENT

SURGERY AT Hamilton General 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 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.

Goal of shoulder replacement

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.

Shoulder surgery

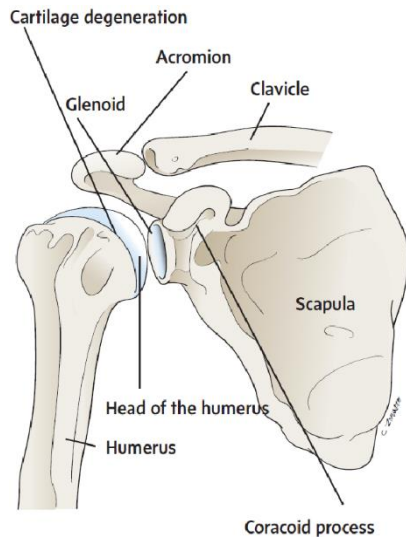
During surgery, the skin, muscles, and capsule of the shoulder are cut and the joint is opened. The head of the humerus bone is removed and replaced with a rounded metal head on a stem inserted into the shaft of the humerus. The other side of the joint may be replaced with a smooth plastic shell that 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 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.



Possible complications related to your

Dislocation/instability

Stability of the shoulder relies on the rotator cuff muscles and ligaments to help hold it in proper position. After surgery the shoulder can move “out of joint”. The incidence 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 (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, 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 resulting in reduced function, 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.

We recommend cold therapy in the form of a Game Ready Ice machine, alternatively an ice pack used every 20 minutes will diminish swelling and improve comfort



Discharge Planning

The majority of patients are discharged directly to 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 (Hamilton is part of the Hamilton Niagara Haldimand Brant (HNHB) Local Health Integration Network (LHIN). The HNHB LHIN encompasses Hamilton, Niagara, Haldimand, and Brant, as well as parts of Norfolk County and Burlington). 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 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 the costs involved. Please mention to your pre-surgical screening nurse if you would like to have the social worker speak with you. Patients are expected to attend Outpatient Physiotherapy after discharge from hospital. If required,

your therapist may refer follow up therapy to where alternate accommodation arrangements have been made.

After your surgery

Recovery in hospital

Day 1: 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. You may be discharged, depending on your recovery.

Day 2: You will be assessed by an occupational therapist who will provide you information on how to complete daily tasks such as dressing and bathing. You should be moving on your own and have manageable pain. Your discharge plan will be finalized and if safe you will be sent home. **All patients should expect to make plans to arrange as much support possible independently PRIOR to surgery**

Pain Management

- Take your pain pills 30 minutes before exercising and follow physiotherapy instruction for use of ice
- Take pain pills before coming for therapy or clinic visits and bring extra with you
- Taking your pain pills regularly for the first few days after surgery will control your pain more effectively
- Pain medication prescriptions cannot be renewed after 5 pm. If you think you will run out of pain medication, please contact your surgeons' office between 9 am to 5 pm.

Physiotherapy exercises after surgery

After you are discharged you will require follow up physiotherapy. Contact the physiotherapy clinic of your choice to arrange your therapy. We suggest you do this before your surgery.

You will be taught exercises by your physiotherapist after your surgery depending on your surgeon's orders.

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

****ONLY DO EXERCISES SHOWN TO YOU BY YOUR PHYSIOTHERAPIST****

Post-operative shoulder care

Shoulder slings

After surgery you will be required to wear a sling to immobilize your shoulder **FOR UP TO 3 WEEKS**. 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.

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 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/therapist 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.

After surgery reminders and discharge instructions

****Unless told otherwise by your surgeon or therapist*****

Care of the Surgical Site

- You may have clear, yellow or reddish drainage on your dressing.
- Change the dressing 48 hours after you leave the hospital and every 48 hours. Use Tegaderm island dressings bought from your pharmacy. If dressings are very wet, change daily.
- Facecloth washing is recommended until you are allowed or instructed to remove sling for shoulder exercises.
- Do not swim or soak in bath, hot tub or swimming pool 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 with your operative arm.
 - 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 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 review with you.

Tips to help you manage at home

Organize- Arrange your cupboards so that frequently used items are at waist level and easier to reach. It's unsafe to climb on stools to reach for items from high places.

Simplify – If able, 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. You may also want to consider Meals on Wheels and grocery delivery services.

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 advised.

Additional supports such as in-home therapy, nursing, personal support etc are available; however, they are limited in supply and will be assessed 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 the sling.
- Some patients prefer to modify their clothing with Velcro tabs/ties to allow easier dressing/undressing.
- Avoid clothing with small buttons, hooks and zippers.
- Elastic waist pants, slip on shoes, and elastic shoe laces make one handed dressing easier.
- You may benefit from the use of a long shoe horn or a dressing hook to help extend your reach when dressing.

Tips for bathing and toileting

- Facecloth washing initially following surgery. Avoid getting the incision or sling wet. The length of time until you are permitted to shower is dependent on your surgeon and restrictions. These will be reviewed 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 side while keeping your operated arm against the side of your body. If help is available, your partner should help clean under your operated

arm. 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/sprays. Tuck a gauze pad/small cloth in the armpit to absorb perspiration if needed.
- You may benefit from a bath chair/bench, non-slip bath mat, long-handled sponge, removable shower head and grab bar.
- 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 “one-handed” individuals.

The illustrations below depict 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 d-ring/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 will 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 percent of shoulder replacements continue to work well ten years after surgery. In patients over 65, 80 percent 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 Dr. Rajaratnam's office to make other arrangements.
- Note that prescription for pain medication will not be renewed after hours by telephone.
- If you have concerns about your care, please contact Dr. Rajaratnam **between 8:00 am to 3:00 pm**.
- **After 3:00 pm**, call Hamilton Health Sciences at 905-527-4322 and ask for the Orthopaedic resident on call.
- **For after-hours assistance**, please go to your local emergency room or urgent care centre.

When to call

Hamilton Health Sciences at 905-527-4322

Contact the surgeon's office or after-hours contact the hospital and ask for the orthopedic doctor on call, 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