About Shoulder Replacement Surgery

Shoulder replacement surgery is a major operation. It is considered when patients have an extremely painful, arthritic, broken or sometimes severely weak shoulder. The shoulder joint is a ball in socket joint with the head of the humerus (arm bone) being the ball and the socket being formed from the glenoid (the end of the shoulder blade or scapula). The rotator cuff tendons attach to the top or head of the humerus and help the shoulder move, along with other muscles like deltoid on the outside of the shoulder.

There are many conditions that can cause patients to consider shoulder replacement surgery. These include:

- **Osteoarthritis**: age related “wear and tear” thinning of the cartilage, which causes the bones to rub against each other.

- **Rheumatoid Arthritis**: an autoimmune, inflammatory arthritis that affects multiple joints, often including the shoulders and can causing thinning of the cartilage and tendons.

- **Post-Traumatic Arthritis**: thinning of the cartilage can happen after a severe trauma or break in the shoulder.

- **Rotator Cuff Arthropathy**: some patients develop arthritis after having had a long standing, chronic tear of the rotator cuff tendons. Patients with this kind of arthritis often a have a very weak arm.

- **Severe Fractures**: a bad break of the top of the humerus is often best treated with a shoulder replacement, especially in an older patient.

- **Avascular Necrosis**: a lack of blood supply to the top of the humerus bone can cause the bone to die off and leads to a painful shoulder. This is called avascular or osteonecrosis.

What Happens During Shoulder Replacement Surgery?

During the surgery, a large incision or cut is made on the skin or the shoulder. The damaged joint surfaces are removed and the joint replaced with a new shoulder called a “prosthesis” or “shoulder arthroplasty”. Sometimes, torn tendons also need to be repaired at the time of surgery.

There are different kinds of shoulder replacement prostheses. Your surgeon will work with you to decide what the best prosthesis for you and your shoulder is.
Shoulder Replacement: A Guide to Recovery After Surgery

Types of Shoulder Replacements

**Total Shoulder Replacement:** Both the head of the humerus and the socket are replaced. This is the most common type of replacement for patients with Osteoarthritis.

**Shoulder Hemi-arthroplasty:** Only half the joint, the head of the humerus is replaced. This type of prosthesis is often used in fractures.

**Reverse Total Shoulder Replacement:** This replaces both the ball and the socket, but switches the pieces so that the ball is attached to the socket and the socket is attached to the top of the humerus. This type of prosthesis is used in patients who have severe arm weakness, rotator cuff arthropathy or sometimes if another replacement has failed.

Where is the Surgery Done?
Shoulder replacement surgery is performed in the operating room under general anesthesia 'going to sleep' but sometimes also with block anesthesia 'freezing the arm'. The surgery typically takes between 2-3 hours and patients spend 2-3 days in hospital after the surgery.

How Long Does Recovery From Shoulder Replacement Surgery Take?

For the first 4-8 weeks after surgery, your surgeon will ask you to wear a sling to protect the repaired tendons and soft tissues around the shoulder. The next phase of recovery, from 6-12 weeks after the surgery, is focused on getting the shoulder to move more normally, while still not doing any lifting that could pull apart the repaired tissues. Around 3 months after surgery, you will start strengthening exercises.

Most of the recovery is complete around 6-9 months after surgery, but there can be improvement for 1-2 years after surgery.

What kind of Outcome can I expect after Shoulder Replacement Surgery?

Most patients can expect that shoulder replacement surgery will significantly reduce the pain in their shoulder. Every patient is different and the outcome depends a lot on the condition of the shoulder before surgery. Most patients have enough motion in the shoulder to day to day activities like dressing, washing their hair and pulling up their pants, without too much difficulty. Some ongoing pain is common and can be frustrating. Most people can return to many of the activities they were doing before their shoulder began painful, but expect to have difficulty with overhead activities or activities that require a lot of use of the arms. This is usually quite tolerable. Some patients can have a lot of shoulder stiffness or a 'frozen shoulder' after surgery. This stiffness can be very painful and frustrating but usually gets better with time, but may take 6-12 months.

If there was a lot of weakness in the arm before surgery, this may not improve much after surgery. Strengthening exercises can help this.

Potential Complications of Shoulder Replacement Surgery

Your surgeon will discuss the risks of shoulder replacement surgery as many of the risks are specific to your situation. It is a large operation and there are some common risks that include risk of deep infection, damage to blood vessels or nerves, fractures, and
Shoulder Replacement: A Guide to Recovery After Surgery

Shoulder replacement can be expected to last around 10-15 years on average until it wears out. Sometimes a prosthesis can become loose before that or develop another problem that may require a second or revision replacement. As shoulder replacement surgery is a major operation, general medical complications such as blood clot, stroke, pneumonia or heart difficulties can occur. The risk of these complications is higher in older patients or those who are already have medical conditions.

How active can I be with my Shoulder Replacement?
A shoulder replacement is an implanted part that can wear and tear just like any mechanical part, for instance like a tire on a car. To help your shoulder last as long as possible, we recommend avoiding activities that heavily load the shoulder (e.g. pushups, lifting heavy loads), activities that require lots of repetitive use of the arms (e.g. singles tennis, chopping wood, throwing) and activities that put the shoulder at risk of injury (e.g. martial arts, contact sports).

Lower stress activities such as walking, hiking, golfing, swimming, cycling or even doubles tennis are safe forms of exercise.

Information About What to Do After Surgery:

How Long Will I be in Hospital?
- Most patients will spend 1-2 nights in hospital.
- You will be discharge or allowed to go home when your pain is controlled and you are able to get in and out of bed and walk without assistance.

Going Home:
- Arrange to have someone take you home after surgery, even if you are taking a taxi

• Arrange to have someone bring you meals or freeze meals before your surgery so that they can simply be reheated.
• Arrange to have someone help you with laundry and cleaning before the surgery

Bathing:
• Keep your dressings dry until your follow up appointment at 10-14 days after surgery.
• Cleanse around the area or use a plastic bag sealed with duct tape to keep the dressings dry.
• If you wish to shower, you may purchase a waterproof "Aquacell" Dressings from One Bracing @ Rebalance MD
• If the dressings get wet, change them
• You may bathe 2 weeks after surgery, if the wound is healed and dry

Care of your Incision & Wound:
• Please do NOT change your dressing unless it gets wet or soiled
• If there is a bulky dressing, you can remove the outer bulky dressing but leave the inner dressing on the skin untouched.
• Leave dressings clean, dry and covered until your follow up appointment 10-14 days after surgery

How to change your dressings if they become soiled or wet:
• Wash your hands with soap & water before you take care of your wound
• Remove tensor bandage
• Throw out the white gauze bandages—the dressings will be stained with blood - and remove the white mepore dressings.
Shoulder Replacement: A Guide to Recovery After Surgery

- Do not remove the Steri-Strips- small tapes that are right on top of the wound. They will fall off themselves.
- Cover wounds with new dressing. Apply new ‘mepore’ or waterproof ‘aquacell’ dressing.
- Buy ‘mepore’ dressings at pharmacy. You must apply a new mepore dressing after each shower.
- Buy waterproof ‘aquacell’ dressing at One Bracing @ RebalanceMD. You may shower with the aquacell dressing on.

Activity:
- Wear your sling whenever you are up for the first 4-8 weeks after surgery as instructed by your surgeon.
- Remove the sling to do physiotherapy exercises 2-3 times per day. See the physiotherapy exercises at the end of this handout.
- Gradually resume normal activities like walking; recovery is gradual and it is normal to feel weak and tired for a couple of weeks after surgery
- You can begin physiotherapy within a week or two.
- Your surgeon will give you a prescription for physiotherapy

Tips for Living with a Sling:
- Many normally simple activities, like dressing, putting on shoes etc. can be more difficult with a sling on.
- This guide offers many tips on how to prepare for your time in a sling.
- Please review it prior to surgery and after.

Pain:
- Discomfort will be moderate and may be severe for the first few days and will gradually get better
- In the first day or two after the surgery, it is better to give the pain medication regularly e.g. every 4-6 hours, rather than wait until the pain is bad.
- Use pain medications as prescribed by your surgeon.
- You will likely be prescribed a narcotic such as dilaudid (hydromorphone), tramacet or Tylenol # 3.
- Gradually reduce your pain medications as your pain decreases

Sleeping:
- Many patients find that they cannot sleep in their usual position after surgery.
- Most patients are more comfortable if they sleep in an upright position for the first few weeks after surgery.
- Sleeping in a “lazy boy” type recliner or creating a “nest of pillows” in the bed is usually most comfortable

Swelling
- Expect swelling for a few weeks following the surgery. This is due to fluid that was introduced into the joint during surgery and inflammation.
- Some swelling or bruising may go into the front of the chest muscles or down the arm to the hand.
- When resting, sit with the affected limb supported with pillows.

Icing:
- Apply ice packs or use a Cryo Therapy ‘Ice Machine’ to reduce pain and swelling.
- Apply ice for 10-15 minutes, 4-6 times per day.
- Never apply ice directly to skin.

Tips for Living with a Sling:
- Many normally simple activities, like dressing, putting on shoes etc. can be more difficult with a sling on.
- This guide offers many tips on how to prepare for your time in a sling.
- Please review it prior to surgery and after.

Pain:
- Discomfort will be moderate and may be severe for the first few days and will gradually get better.
- In the first day or two after the surgery, it is better to give the pain medication regularly e.g. every 4-6 hours, rather than wait until the pain is bad.
- Use pain medications as prescribed by your surgeon.
- You will likely be prescribed a narcotic such as dilaudid (hydromorphone), tramacet or Tylenol # 3.
- Gradually reduce your pain medications as your pain decreases.

Sleeping:
- Many patients find that they cannot sleep in their usual position after surgery.
- Most patients are more comfortable if they sleep in an upright position for the first few weeks after surgery.
- Sleeping in a “lazy boy” type recliner or creating a “nest of pillows” in the bed is usually most comfortable.

Swelling:
- Expect swelling for a few weeks following the surgery. This is due to fluid that was introduced into the joint during surgery and inflammation.
- Some swelling or bruising may go into the front of the chest muscles or down the arm to the hand.
- When resting, sit with the affected limb supported with pillows.

Icing:
- Apply ice packs or use a Cryo Therapy ‘Ice Machine’ to reduce pain and swelling.
- Apply ice for 10-15 minutes, 4-6 times per day.
- Never apply ice directly to skin.
Shoulder Replacement: A Guide to Recovery After Surgery

Return to Work:
- When you are able to return to work depends on:
  - the kind of job you have and its physical demands
  - how much pain & swelling you have after surgery
  - how your physiotherapy is progressing
  - if you are able to modify your job or work from home
- Your surgeon will help you decide when to return to work
- Expect to take off at least 2-4 weeks for a desk job that you are able to do with your arm in a sling
- Expect to take off 3-4 months for work where you need to use both arms
- Expect to take off around 6 months for more physically demanding work.

Healthy Eating:
- Start with clear fluids after surgery
- Gradually increase to a well balanced diet as your appetite allows
- Drink at least 6 cups of fluids daily

Smoking:
- Smoking causes problems with the healing of bones and tissues
- Not smoking or smoking less for 2 months before surgery and for 3-6 months after surgery will reduce the chance of a problem with healing
- Visit http://www.quitnow.ca for information about tools and medications to help you quit smoking

Driving:
- Do not drive while taking pain medications or if your arm is in a sling
- Discuss with your surgeon when it is safe to drive. You can expect that you will not be able to drive for at least 4-8 weeks after the surgery.
- If your ability to safely drive (e.g. swerve sharply, perform an emergency stop) is impaired, your insurance may not be valid in the case of an accident

Supplies/special equipment:
- A sling will put on in the operating room.
- Alternative Shoulder Sling: If you find the sling supplied by the hospital quite irritating or uncomfortable, you may wish to buy a more padded sling which some patients find more comfortable. This is entirely optional. These can be bought at One Bracing @ Rebalance MD or other medical supply stores such as McGill & Orme, Island Orthotics and others.
- Your surgeon may have prescribed you a special sling prior to your surgery. If so, please bring it to your surgery.
- If you purchase a sling, make sure that you have it fitted BEFORE your surgery so that it is properly adjusted. This should be done where you purchase your sling.

Changes in medications, activity and diet can cause constipation (hard, dry bowel movements)
To avoid constipation: drink lots of fluids, eat high fibre foods such as prunes, fruits, bran, whole grains and vegetables
Take a stool softener or laxative if needed. Ask your surgeon or pharmacist to suggest one.

Going to the Bathroom:
- Changes in medications, activity and diet can cause constipation (hard, dry bowel movements)
- To avoid constipation: drink lots of fluids, eat high fibre foods such as prunes, fruits, bran, whole grains and vegetables
- Take a stool softener or laxative if needed. Ask your surgeon or pharmacist to suggest one.
Shoulder Replacement: A Guide to Recovery After Surgery

- **Cryotherapy "ice machines":** are an alternative to ice packs. They can be extremely helpful to reduce pain and swelling. These can be bought at One Bracing @ Rebalance\textsuperscript{MD} or other medical supply stores such as McGill & Orme, Island Orthotics and others.

**Your Regular Medications:**
- Resume your regular medications unless instructed otherwise by your surgeon

**Follow Up Appointment:**
- A post-operative appointment should be scheduled for approximately 10-14 days post surgery
- Call Rebalance\textsuperscript{MD} at 250 940 4444 if you do not have an appointment scheduled
- Write down your questions for the surgeon before the appointment

**Reducing the Risk of Infection of Your Shoulder Replacement:**
- Tell your doctor, nurse, dentist or other health care provider that you have a joint replacement prior to having:
  - Dental work (including routine cleaning)
  - Medical procedures such as bladder, lung, prostate or colon procedures
- You may be given an antibiotic to take prior the procedure

**Call your Surgeon if you have:**
- Increasing pain or swelling that is not relieved by elevation, ice and pain medications

- Incisions that are red, puffy, hot or leaking fluid more than 72 hrs after surgery
- Fever greater than 38.5°C
- Signs of circulation problems (e.g. coolness, change in skin colour, numbness) which is not relieved by rest
- Persistent nausea and vomiting
- Chest pain or difficult breathing that is unusual for you
- Inability to pass urine for more than 8-10 hours

**If you cannot reach your Surgeon:**
- Call your family surgeon, go to a walk-in clinic or hospital emergency department

**Non-emergency health information and services:**
- HealthLinkBC [www.healthlinkBC.ca](http://www.healthlinkBC.ca)
- Tel: 811 from anywhere in BC
- Tel: 711 for deaf and hearing impaired assistance (TTY)
Physiotherapy Exercises for Shoulder Replacement Patients

You may begin these exercises immediately after surgery unless told otherwise by your surgeon. Do the exercises 2-3 times per day for around 10 repetitions each.

Your surgeon will give you a prescription to see a physiotherapist and tell you when to see a physiotherapist.

Elbow Movement Exercises:

1. Elbow Flexion-Extension: sitting up or lying down, take your sling off and keep your arm by your side. Straighten your elbow as far as possible. You can use your non-operated arm to help guide. If you have had a biceps tendon repair, do not do this exercise until approved by your surgeon.

2. Wrist Flexion-Extension: Keeping your arm at your side, bend your wrist forwards and backwards as far as possible. You may need to help with your non-operated hand.

3. Grip: Make a fist or squeeze a rolled up cloth or tennis ball.

4. Palm Up/Palm Down: keeping your arm at your side, start in a hand shake position. Slowly rotate your palm down as fully as possible and up as fully as possible until you feel a stretch in your forearm. If you have had a biceps repair, do not do this exercise until approved by your surgeon.
Shoulder Replacement: A Guide to Recovery After Surgery

Shoulder Pendular Swing Exercises

Spend about 15 minutes, 3 times a day exercising your shoulder.

- Rest your good arm on the edge of the table
- Bend over from your waist
- Allow your affected arm to hang down – it should hang limp and loose
- Swing the arm back and forth in a smooth pendular motion about 10 times
- Then allow the arm to circle gently in a clockwise direction with circles that grow gradually larger. Repeat 10 times.
- Now go counter clockwise. Repeat 10 times.

The information in this handout is intended only for the person it was given to by the health care team. It does not replace the advice or direction given to you by your surgeon.