Fraser Orthopaedic Institute &
Fraser Orthopaedic Treatment Clinic
403 - 233 Nelson's Crescent New Westminster BC V3L0E4

FRASER ORTHOPAEDIC INSTITUTE

Total Hip Replacement

Preparing for Surgery

- Getting healthy before surgery, eating a balanced diet, adequate hydration and rest.
- Smoking cessation program – quit smoking/stop using nicotine products. Nicotine use slows healing, increases risk of infection and contributes to an overall poor outcome after surgery.
- Make necessary changes to ones home for arrival post operatively: securing loose cords, removing potential tripping hazards, placing essential items at arms reach, installing shower safety grips/bars.
- Find a physiotherapist for post op therapy.
- Rent/purchase ambulatory aids and helper items: cane, walker, raised toilette seat, reacher/grabber, bath chair, long handled shower sponge, practical nonslip shoes, long handled shoe horn, etc. These items can be purchased at health stores, pharmacies and/or your local Red Cross.

What you should expect before & after your Surgery?

- You will be admitted to hospital the day of your surgery. Please ensure that you have nothing to eat or drink for at least 8 hours before surgery.
- Take your regular medications (except blood thinners and insulin) the morning of your surgery with a sip of water.
- After surgery is complete you will be cared for in the recovery room for 1-3 hours before being transferred to the orthopaedic ward for your overnight stay. Typically patients will stay in hospital for 2-3 days post surgery.
- It is safe to be full weight bearing on the operated limb immediately following the procedure.
- Physiotherapy will begin on post operative day 1, you will be shown strengthening exercises and will have assistance getting out of bed and you will begin walking.
- Rest, elevation and ice can help with decreasing post op pain and swelling.
- Upon discharge you will be given a post operative package that will include a physiotherapy requisition, post operative appointment information, a prescription for pain medication and a prescription for blood thinners (to prevent deep vein thrombosis/blood clot).
- A formal physiotherapy program should be started the first week after being discharged from the hospital.

Things you NEED to have for your Surgery/Recovery

1. Cane, walker or crutches – whichever aid is most manageable for you.
2. Bring all regular/required medication for the duration of hospital stay.
3. CPAP or BiPAP respiratory unit for hospital stay if you currently use one.
4. Someone to pick you up at the hospital after surgery (you will not be released on your own) and preferably someone who will stay with you for the first 24 hours after you return home.

Things you might find Helpful for your Surgery/Recovery

1. Cryotherapy unit with ice
2. Bath chair
3. Long handled shoe horn
4. Reacher/grabber assistance aid
5. Raised toilette seat
6. Long handled shower sponge
7. Practical shoes

Medical Equipment Rental

- Red Cross Rentals **www.redcross.ca**
- Orthopaedic Equipment **www.bonefoam.com**

Community Resources

- Seniors Health Care Support Line – 1-877-952-3181
- Health Link BC – Health Hotline Dial 8-1-1
- Health Link – **www.healthlinkbc.ca**
- Canadian Orthopaedic Association – **www.canorth.org**
- Osteoporosis Canada – **www.osteoporosis.ca**

- Physiotherapist Association of BC – **www.bcphysio.org**
- Physical Activity Line: Community Programs – 604-241-2266
- Physical Activity – **www.physicalactivityline.com**
- Orthopaedic Information – **http://orthoinfo.aaos.org/topic.cfm?topic=a00377**

Things you should avoid after your Surgery

1. Smoking - has been shown to slow bone healing by 30-50%.
2. Avoid rubbing creams or ointments (Antibiotic or otherwise) on the surgical site unless requested by your surgeon.
3. Low crouching, kneeling or pivoting – these movements may increase the risk of dislocation of the hip in the first 6 weeks post operatively. Avoid low sunken furniture. When in a sitting position your hips should be higher than your knees to prevent implant dislocation.
4. Getting dressed standing up; dressing should be carried out sitting in a sturdy chair with armrests for extra support to prevent falls.
5. Do not cross your legs or ankles to prevent implant dislocation.
6. Do not soak in baths, hot tubs or pools and do not sit in the bottom of the shower/bath tub, until advised it is safe to do so by your surgeon.
7. Avoid stop-start twisting motions or impact stresses such as dancing, running, jumping, tennis and/or skiing until advised to do so by the surgeon.

Fall Risk & Prevention

Getting dressed, navigating stairs, maneuvering in the shower, walking on uneven or wet ground are all potential fall risks. The best way to prevent a fall is to always use your walking aid/keeping your walking aid at arms reach until the surgeon and/or physiotherapist has discharged you from them. Wearing practical nonslip closed toe/closed heel shoes will help give you extra stability. While getting dressed do not stand, you should use a sturdy high backed chair with arm rests to sit and get dressed. For the shower you should be using at minimum a nonslip bath mat. You may find a sturdy plastic shower chair or bath chair helpful. Do not take baths or sit in the bottom of the bathtub/shower to wash, as it is unsafe to get up. Climbing stairs can be challenging and should be discussed with your care team before being discharged from the hospital. If you suddenly feel faint or dizzy, slowly take a seat or use your walking aid for support if a chair is not available.

Follow-up

- Your first follow up visit will be approximately two weeks after your surgery in Dr. Stone's office/clinic. At this visit Dr. Stone will assess the healing of the wound and remove any sutures or staples that are present.
- Subsequent follow up visits will be arranged at 6-8 weeks, 12 weeks, 26 weeks and 52 weeks post operatively. Additional visits will be arranged if required.
- X-rays will be required to assess healing at the 6 month visit.
- You are expected to enroll in an outpatient physiotherapy program after your surgery. This program should begin between 7-14 days post op.
- Physiotherapy programs should focus on the following:
    - 0-2 weeks - swelling reduction
    - 2-6 weeks - walking with assistance, working on range of motion
    - 6-8 weeks - strengthening/range of motion and weaning from ambulatory aids
    - 6-8 weeks onward - progress strengthening of quadriceps, hamstrings and hip abductors
- In most cases ambulatory aids can be discontinued 4-6 weeks post operatively at the discretion of Dr. Stone and/or your physiotherapist.
- Ice is useful for swelling/pain reduction 4-8 weeks post operatively.
- Aim to taper off narcotic pain medication 2-4 weeks post operatively.

Potential Complications

Infection

Signs of infection include increasing redness, swelling, temperature and pain. All of these symptoms can occur normally in the post op period, the main differentiation between normal post op healing versus infection is that in normal healing these symptoms improve with time. Individuals with diabetes, smokers and those who have had a prior infection in this area are at higher risk of developing an infection. Potential infections should be reported to the surgeon's office. To help prevent infection you should wash your hands regularly, keep your incision site and bandages clean and dry. Do not touch, rub or scratch your incision site.

Blood clots

Signs of a blood clot in the leg include calf pain, swelling of the calf and/or foot. These can be normal post operatively and is particularly concerning if the swelling does not decrease with limb elevation. If one has the symptoms of a blood

clot they should report them to the surgeon's office immediately. If it is after hours or your surgeon's office is closed, report to the Emergency Department.

Swelling and numbness
Are very common after total hip replacement surgery. Swelling may last for prolonged periods following the operation. Limb elevation and ice therapy can help reduce swelling. If one experiences increasing numbness it is important to report this to the surgeon's office.

Failure to resolve all symptoms
Some pain, instability or stiffness may still be present even after a successful total hip replacement. It is important to appreciate that there are many different potential sources for symptoms.

Neurovascular injury
Numbness over the incision site is very common and will improve with time. Nerve injuries affect muscle control, sensory control, numbness and/or burning. Progressive numbness or weakness should be reported to your surgeon's office.

Leg Length Discrepancy
Leg length discrepancy occurs in some individuals post total hip replacement. Factors include but are not limited to prior leg length inequality, hip contractures, pelvic obliquity (misalignment/tilting of the pelvis), scoliosis, and/or a prior poorly healed fracture in the femur. This is typically treated with a shoe lift to help counter the discrepancy. Most symptoms of leg length discrepancy in the first weeks/months post operatively resolve without treatment. If you are concerned about this it should be discussed with your surgeon.

Muscle atrophy
Is when muscles waste away due to disuse. It is common to experience muscle atrophy as a result of total hip replacement or any other surgery. Specific strengthening exercises should be carried out with the physiotherapist to regain musculature.

Asymmetric gait
While recovering from total hip replacement surgery there is the chance that disproportional loading of other parts of the body may take place (ankle, knee, back). This can lead to irritation of tendons, muscles and ligaments, which can be painful. This pain typically resolves without treatment once the normal gait pattern is restored.

Component Breakdown/Wear
Your total hip replacement is comprised of the femoral stem the long stem-like apparatus that is inserted into the femur (thigh bone) and may be pressed or cemented into place, a femoral head (ball of the ball and socket joint), acetabular liner (protects the femoral head) and an acetabular shell/component. Wear of polyethylene liners and/or bony changes such as osteoporosis and can lead to dislocation of the implant, fracture of the femoral stem, pain, discomfort, difficulty ambulating and clunking. If you experience these symptoms on a regular basis your surgeon's office should be advised and a potential follow up appointment may be warranted.

Implant Dislocation
Dislocations can occur post total hip replacement and happen for a variety of reasons: bending at the waist excessively, sitting on a low sunken chair/couch and or sitting for a prolonged period of time with your knees higher than hips. If you experience a dislocation your surgeon should be notified as soon as possible. If your surgeon is unavailable or if it is after hours and are experiencing a dislocation you should go directly to the emergency room. A relocation of the hip joint will most likely be attempted/performed. Most first time episodes of dislocation o not require surgery. If the dislocations are recurrent, revision surgery may be needed. Typically a dislocated hip joint will be treated with a surgical procedure known as open reduction internal fixation.

Intraoperative Fracture
Although the risk is minimal, intraoperative fractures are possible. Intraoperative fractures are caused from but not limited to the use of an un-cemented total hip technique, prior bone loss or revision total hip surgery. If a fracture does occur intraoperatively, your surgeon will perform an internal fixation procedure to secure the fracture and will discuss this with you post operatively. In most cases this will change the post operative activity profile, for example non weight bearing for 6-8 weeks.

Heterotopic Ossification
Is when bone tissue forms on the outside of the skeleton. Heterotopic ossification occurs when the body mixes up signals for creating new bone cells, thus bone is generated in areas that it usually wouldn't be. The most common symptom of heterotopic ossification is stiffness of a joint and pain. This can be common in small quantities after total hip replacement. In very rare cases the heterotopic ossification may need to be removed.

Complex Regional Pain Syndrome
Is an amplified musculoskeletal chronic pain condition, which occurs in very few individuals after surgery. Symptoms include but are not limited to continuous burning or throbbing in the leg, sensitivity to touch, sensitivity to cold, pain, swelling, temperature/color changes of the skin, changes in skin texture, muscle spasms and/or decreased mobility of effected limb. Your surgeon will help create a treatment plan or may defer to your family doctor for ongoing management of these symptoms. This is relatively rare after total hip replacement surgery but can happen.

Delirium
Is an acute state of confusion and disorientation and can be caused by medications used in surgery for post operative pain. This is most common in the first days following surgery. The best ways of preventing delirium are getting enough sleep, wearing appropriate glasses/hearing aids, limiting alcohol intake, reading and socializing. If you feel that you are experiencing delirium, your family physician should be contacted.

Constipation
Difficulty or inability to pass bowel movements. Constipation is a common side effect of the pain medication you are given to help with post operative pain. Ensuring that you eat a balanced high fiber diet (including bran, prunes, whole grains, fruits and vegetables) will help to prevent constipation. Remaining well hydrated is another great preventative measure for constipation. If constipation is ongoing or recurrent, laxatives may be prescribed. Contact your family physician or pharmacist if you are experiencing constipation for longer than 3 days.

Driving Protocol
The American Academy of Orthopaedic Surgeons recommends no driving for a minimum of 6 weeks post operatively. Driving is prohibited for the first 6 weeks post operatively, regardless of which side was operated on and whether your car is an automatic or manual - no driving is advised.