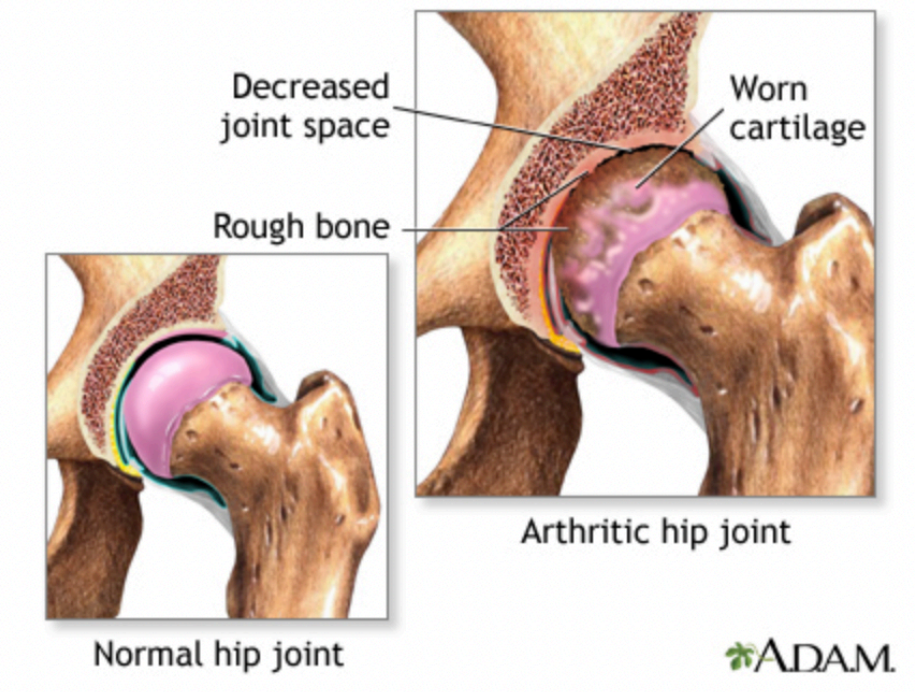
# KELOWNA BONE & JOINT HEALTH

## Total Hip Replacement

### What is Arthritis:

Arthritis is a degeneration of the hard cartilage within the hip. The degeneration can be from rheumatoid arthritis, can be genetic, or be due to injury, fracture, avascular necrosis, or from the shape of the hip. Unfortunately, once a joint develops cartilage damage, those changes are irreversible. Early on, if the damage is not severe, symptoms can come and go, be based on activity, and even change with the weather. Unfortunately arthritis seems so be a “one-way street”, and as the damage within the joint progresses, so do the symptoms.



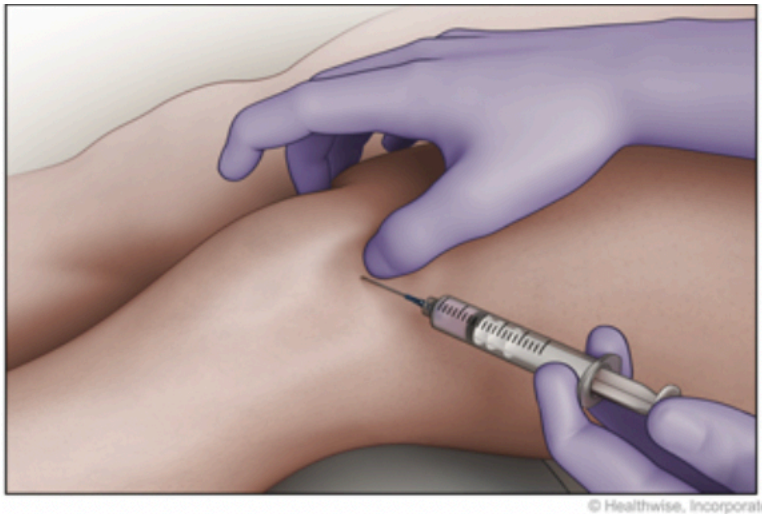
## I have arthritis in my hip, now what?

Not every person who has arthritis in their hip requires surgery. Treatment will depend on the stage of arthritis, possible non-operative treatment options, and discussions with your surgeon. The first step to attempting to alleviate pain in the hip, is lifestyle modifications. High impact activity can increase the pain associated with arthritis. Changing from a running/pounding activity, to a swimming, walking, **low impact activity** can improve symptoms dramatically. In addition, every effort should be made to **keep the leg strong** (with or without physiotherapy, see exercises below). The main goal in these strategies, is to decrease force seen by the leg. One key element to decreasing forces is **weight loss. Medications** can also help to alleviate pain. Using Tylenol or Anti-inflammatories (ie ibuprofen, naproxen etc) when the pain is bad, or even when you are planning an activity (going on a hike), that you know is going to flare up the pain.

## What about injections?

When the above treatments are just not enough, and you and your surgeon are not yet ready to go forward with hip replacement, your surgeon may recommend injection of the hip joint. The hip joint is quite deep to the skin, so typically requires ultrasound guidance, and will be done either at the hospital, or at the associated Physiatry office at Kelowna Bone and Joint Health.

**Steroid Injection:** Cortisone is actually the "gold-Standard" to which all other injections are compared. It acts as a powerful anti-inflammatory delivered directly into the hip. The cost is the lowest of all injections, and can work well for many patients. For some people with early arthritis, one injection can bring the hip back to a very functional state, and with diet and exercise, the results can be long lasting. For those with more significant arthritis, it is more of a temporary solution that can last anywhere from 3-6 months. Injections can be repeated no more than every 3 months.




**Viscosupplementation:** (Synvisc, Durolane, Monovisc, Cingal) These type of injections are **NOT ROUTINELY** injected into the hip joint. These injections contain a highly viscous solution (syrup

like consistency), containing Hyaluronic Acid, which acts attempting to lubricate the joint. The main downside of this medication is cost, and range between $300-600, is not covered by MSP, but most insurances will cover at least a portion of the medication.

**Platelet-Rich Plasma**: We do not offer this at Kelowna Bone and Joint currently, as the studies have not yet proven it is any better than the options above. However studies are ongoing, and if in the future there is some proof it is a better alternative, we will re-evaluate.

**Stem Cell Therapy:** Despite many studies trying to show their effectiveness, there is absolutely no evidence to support the use of stem cells in the arthritic knee**.** The government caught wind of patients being charged $5000-$10,000 dollars for a treatment that has proven inferior to steroid in the studies, and across Canada, they have shut down the use of stem cells. Unfortunately there is one clinic in Kelowna who has managed to side step government regulation by labelling his use as an "ongoing study", at enormous cost to the patient. At Kelowna Bone and Joint Health, we take a united stand against the use of stem cells, as the results simply are not good enough to warrant that cost to the patient. Each of us are happy to talk to you about this more during your appointment.

## Am I a surgical candidate?

The decision to go forward with surgery is dependent on the degree of arthritis, the response to the treatments above, and the degree of disability the arthritis is causing. Surgery is not without its potential complications, and therefore the pain should be severe enough that it is adversely affecting your quality of life. If you are still able to walk several kilometres, play golf or tennis, with some mild pain at the end of the day, you may not yet require surgical treatment. Pain at night, and pain at rest are good indicators that you might be a surgical candidate. Unfortunately there are some circumstances, where despite the level of arthritis, surgery is simply too dangerous. All patients must be medically fit to go forward with major surgery. Recent heart attacks or strokes may preclude us from being able to provide surgery. Elevated BMI and obesity increase the risk of all potential complications. Different surgeons will have different "cut-off" points for acceptable BMI, ranging from 35-45, above 40 the surgery becomes more risky, and above 50 unfortunately we cannot safely go forward with surgery. If this is the case, you will be referred to the "Get to surgery" program, which is a combination of diet and nutrition counselling with a goal of getting the BMI low enough to be safe to go forward with surgery.

## What are the potential complications?

Patients must carefully consider the potential risks of surgery prior to making the decision to go ahead.

**Major Risks**: The risk surgeons are often most concerned about is infection, which can happen 1-3% of the time. Risk of infection goes up dramatically in patients with diabetes, BMI over 35, and active smokers. Patients receive antibiotics prior to the procedure, but unfortunately that does not bring the risk back down to zero. If infection were to happen, it can get down onto the metal itself, which our body cannot fight off on its own, and often requires revision surgery to clean out the hip, place some antibiotic coated replacement parts for a while, before going back in once the infection has cleared to do it all again. Other major risks that happen extremely infrequently include heart-attack, stroke, blood clots that travel to the lung and can be life threatening, bleeding requiring a blood transfusion, and damage to surrounding nerves and arteries.

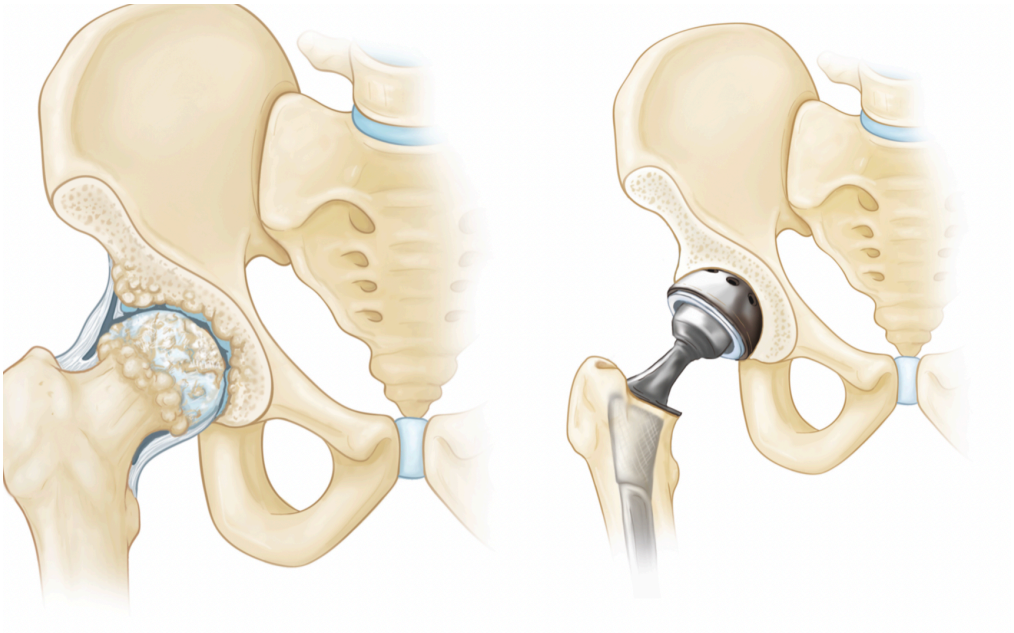
**Minor Risks**: Leg length change, hip dislocation, crack in the femur (thigh) or acetabulum (cup), are some complications that can happen. The most common thing to happen in hip replacement surgery, is a difference in leg lengths, which works to offset the risk of dislocation. When the surgery is performed, we are removing a large ball, that has been stiff for some time, and replacing with mobile, and smaller metal and plastic parts. This gives an inherent instability to the new hip joint. Every effort is made in the operating room to even out the lengths of the legs, however, if there is any feeling that the hip could dislocation in certain positions, we add length into the construct to tension the surrounding structures, and gain stability. The human body can accommodate up to a 2cm leg length difference, and differences in leg length after hip replacement is usually within millimetres. We tell most patients, that it is a much more satisfying result to have a leg that is a little bit longer than the other side, than to have a hip that is unstable, with the risk of dislocation. Most patients do not notice up to a 1cm difference, but if so, this can be accommodated with a shoe-lift in the other shoe.

**Satisfaction: The** goal of this procedure is to produce a pain free joint, that you can function on. Hip replacement surgery is successful with excellent patient satisfaction in about 90-95% of individuals. There is an overall risk of complication in about 2-5% of patients. It often takes 3-6 months to fully see the benefits of the surgery, and patients continue to see improvement for up to 1 year.

## How is the surgery performed?

Surgery is preformed via a 10-15cm incision directed on the postero-lateral portion of the upper thigh. Once we have good exposure around the hip, the hip is dislocated, and the femoral head is removed. The cartilage of the cup is shaved away according to size, and a metal cup is placed. The thigh bone is hollow, and we place a metal stem down into this tube. We then use a plastic liner on the cup, and a metal or ceramic head (depending on age), to recreate the hip joint. For

more information on how the surgery is performed, please follow the video links on our website, or through the care sense app.



## What should I do while awaiting surgery?

It is imperative to keep the leg as strong and mobile as possible while waiting for surgery. Increasing muscle strength in legs and core will not only help improve balance, but can help speed overall recovery. **See pre-habilitation hand-out for exercise guidance.** The YMCA has a great program called “Healthy Hip and Knee”, which is focused on people who have hip and knee arthritis. Walking, stationary bike, at home strengthening exercise, can all go a very long way in your pre-habilitation. If you smoke, quit! Or at least try. Smoking dramatically increases the risk of infection in knee replacement. Some surgeons may defer your operation entirely until you have quit smoking. If you are a diabetic, pre-operative and post-operative sugar control is imperative. High Hemoglobin A1Cs (HgA1c) are associated with increase risk of heart attack, stroke, and post operative infection. Any improvement in sugar control will help mitigate this risk. If the HgA1c is too high (often above 6) surgery will be deferred until there is better control, as the risks to you are just too high. Any weight loss will help, weight loss decreases risk of infection, and speeds up post-operative recovery. Throughout the pre-operative journey, the Surgical Optimization Clinic will be checking in on your status, ensuring you remain a candidate

for surgery. If you have access to the care sense app, you will be asked to provide data on smoking, weight loss, and HgA1c.

## What can I expect post-operatively?

Most patients will spend one night in hospital, but many patients are candidates to go home same day. Same day surgery will be suggested by your surgeon, if they feel you are a candidate. The physiotherapists will work with you, teaching you how to do the early exercises, teaching you how to safely use the walker, how to get up and down stairs, and what precautions need to be followed. Once you are cleared by physiotherapy, you will be discharged home, with scheduled follow up with your surgeon at the 10-14 day mark.

## Special Equipment Required

**Home Preparation and Equipment:**

You will need to obtain a four-wheeled walker, and prepare your home for your arrival on your operative day. Try to avoid cords, or bulky rugs that you could catch your walker on and have a risk of fall. If you have a significant amount of stairs, you may want to sleep on the main floor for the first night or two, and should plan accordingly.

## Does the Surgery Hurt:

All surgery is subject to pain. Patients with debilitating hip arthritis often wake up with post surgical pain, but the deep seated arthritic pain that has been present for some time, is now gone. Unfortunately post-surgical pain in unavoidable, however there are ways we can make the pain more bearable. A deep injection of local anesthetic and an anti-inflammatory are injected into the capsule of the hip at the time of surgery. It is important to be on top of the pain medication from the time you are discharged home. A multi-modal style of therapy will be prescribed including Tylenol, an Anti-inflammatory (Celebrex or ibuprofen), and Tramadol (narcotic). These three medications work synergistically, and it is important to take them all regularly for the first 2 weeks.

## Post Operative Protocol:

The key to success of a total hip replacement, is early and often exercise both with and without physiotherapy. The four-wheeled walker is used for balance and support. Weight bearing is allowed, unless specifically directed otherwise. You will be placed on hip “precautions”. The goal of these precautions are avoid any positions that could cause the hip to become unstable.
At home you will need a raised toilet seat, as well as a pillow for between the legs while sleeping, to avoid these position. Formal physiotherapy is initiated within two weeks of surgery. Plan to take 6-8 weeks off of work for an office job, and 3-6 months off for a physical labour job.

## How long will my Hip Replacement Last?

No one can predict this for sure. Individual patients vary in size, weight and the demands they place on their implants. Certainly, patients under the age of 65 will place increased demands on their implants creating concerns about longevity. Typically, a total hip replacement can be expected to last 20 years minimum. In lower demand patients, they may last 25 years or longer. X-ray follow-up may be required in younger patients who are more likely to wear out their hip in their lifetime.