

# Total Hip Workbook

## [Introduction](#)

For many years, I have struggled to find a way to fully inform my patients facing **Total Hip Replacement (THR) Surgery** about the benefits and risks of this procedure. It is my duty to inform you of all possible risks, but I do not want to frighten you by doing so. Too often, we physicians “talk medical,” and this gets in the way of patient understanding.

For this reason, I have created a **Total Hip Workbook**, an informed consent document that allows you to participate interactively to learn about this procedure. When you complete this workbook, you will be well informed about THR. While I cannot begin to cover all possible occurrences or medical misadventures that may occur after this operation, the following pages address the most common situations I have seen.

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# Total Hip Workbook

## Part 1: Understanding Outcomes and Expectations

### Expected activity:

Your activities cannot be expected to greatly increase after this surgery. For example, if you play tennis now with pain, you should be able to play tennis after surgery with less pain. Allowed activities after THR include walking, swimming, playing golf, playing doubles tennis. We do not recommend skiing, singles tennis, contact sports, jogging, or running.

**\*\*\*I understand that my activities will not necessarily increase after THR. \_\_\_\_\_**

### Pain relief:

Few THR patients experience no pain whatsoever after the surgery. Indeed, most patients will have varying degrees of pain, depending upon their pain threshold. After all, you have had major surgery. An artificial hip is not the same as an original, healthy hip. Some patients will even have pain after surgery that cannot be explained.

Complexity can be compounded if a patient has other health problems. For example, patients who have back problems may sometimes have continued unexplained or frustrating pain after hip replacement. Nerves that are irritated from the back problem can innervate the areas around the hip and buttock.

Patients who have had previous hip surgery will have less likelihood of an excellent result. Neither can patients who have sustained severe injuries about the hip prior to surgery expect to have an excellent result.

You cannot expect to have a perfect hip after THR. After all, the surgery has repaired a flawed joint, replacing it with an artificial joint; therefore, it cannot be the same as a natural, healthy hip.

**\*\*\*I understand that my hip replacement will not feel like a normal hip. \_\_\_\_\_**

**\*\*\*I understand that I may have pain that persists after surgery. \_\_\_\_\_**

**\*\*\*I understand that my surgeon may be unable to explain continued pain.**

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**\*\*\*I understand that patients with chronic back problems will sometimes have continued pain. \_\_\_\_\_**

### **Typical outcomes after hip replacement:**

You must remember that results of hip surgery depend upon the state of your hip before surgery. In other words, if your hip was in a very bad condition before surgery, your results will not be as good as someone whose hip was in better condition than yours. If your hip was in a bad condition, good--not excellent-- results are all you can hope to have. The earlier in the disease process that you have surgery, the better your outcome will probably be. In other words, someone with a mildly arthritic hip will probably be more satisfied with the result of surgery than someone who has had a severely arthritic hip prior to surgery. Patients who have the surgery earlier in the disease process will have better satisfaction with the surgery. Patients who wait for years to do something about their hip problem will have a less satisfactory result.

According to statistics nationwide, 88% of patients having total joint replacement surgery will have a good to excellent outcome. Bear in mind: 88% is not 100%.

**\*\*\*I understand that the worse my hip is before surgery, the more difficult it will be for me to have an excellent result. (*Excellent* meaning that the hip will have a nearly normal range of motion with little or no pain.) \_\_\_\_\_**

**\*\*\*I understand that 12% of patients undergoing this procedure will have a fair to poor result. \_\_\_\_\_**

### **Joint Longevity:**

Most artificial hips will last from 10 to 15 years, but we cannot guarantee this longevity. Many factors are responsible for the life span of a hip replacement. These factors include the patient's age or weight, activities undertaken after surgery, and the alignment of the prosthesis.

Sometimes mechanical failure beyond a surgeon's control may happen, and if it does, revision surgery will be required.

**\*\*\*I understand that my hip replacement will probably last 10 to 15 years, but there is no guarantee of that. \_\_\_\_\_**

## **Part 2: Understanding Complications**

**Below is a list of some of the more common complications:**

### **Infection:**

Infection is a known complication of THR Surgery. The rate of infection is approximately 1% or less. Reasons for infections are extremely varied. Frequently, infection has more to do with the patient's ability to fight minor infections than anything else. Patients with an immunocompromised state are at an increased risk of infection, and a nutritional screen prior to surgery can identify those patients.

Your surgeon will do everything possible to prevent this infection, including using proper antibiotics prior to and after surgery, wearing body exhaust suits while doing the surgery, and performing the surgery in high air exchange operating rooms. Despite all of this, infection has always been—and will probably always be—a possible complication of orthopaedic implant surgery. Fortunately, it is very uncommon.

Patients who do develop deep infections of their hip joint should expect further surgeries—at least two more—to correct this problem. Patients in whom deep infections do occur will definitely have an inferior result compared to patients who do not develop this complication.

**\*\*\*I understand that infection is a known complication of THR. \_\_\_\_\_**

**\*\*\*I understand that infection is frequently due to the patient's inability to fight infections. \_\_\_\_\_**

**\*\*\*I understand that the infection rate for surgery is approximately 1%. \_\_\_\_\_**

**\*\*\*I understand that if infection develops, it will require further surgery to correct the problem. \_\_\_\_\_**

### **Wound Healing Complications:**

The incision or "wound" may not heal properly in some patients. The wound's healing may be delayed in some patients.

This is more common in patients who are not nutritionally normal. Your preoperative labs can determine nutritional normality. Patients who are not nutritionally normal are those who have lower protein levels in their blood. (Protein levels are determined by the albumin level in your blood.) Another indicator of nutritional abnormality is your Total Lymphocyte Count. This is determined by looking at your blood count. When any or all of these labs are abnormal, the patient may have as much as 5 to 7 times increased risk of wound healing problems.

It is important for you to realize that a high percentage of patients with wound healing problems may develop a deep infection of their prosthesis.

**\*\*\*I understand that would healing problems are in large part related to my medical health prior to surgery. \_\_\_\_\_**

### **Deep Venous Thrombosis (DVT) and Pulmonary Embolism (PE)**

Deep Venous Thrombosis (DVT) may be statistically the most common complication after joint replacement surgery. This will happen approximately 4%-14% even with state of the art treatment. This is not serious unless the clots develop in the veins of the thigh. These clots are worrisome because they may break loose and travel higher to the lungs, which is then called a Pulmonary Embolism (PE). Pulmonary Emboli are uncommon, and even when they occur are rarely fatal, but they can be. This particular condition is the most worrisome complication associated with any surgery, especially orthopaedic surgery. Fortunately we have very good ways to diagnose and treat this condition. The current orthopaedic literature would suggest that the chance of a PE is 0.9% and the risk of a fatal PE is 0.1%.

**\*\*\*I understand the DVT is one of the more common complications after Total Hip surgery, even with treatment. \_\_\_\_\_**

**\*\*\*I understand that PE is rare, but can happen, even with treatment with blood thinners. \_\_\_\_\_**

### **Post-operative Dislocation of your Total Hip Replacement**

Dislocation is when your hip replacement pops out of place. This complication involves many factors, which may predispose someone to have this problem. A history of alcohol use on a regular basis, previous hip surgery, and a weakness with use of the leg, elderly females, dementia or decreased mental acuity, all have been implicated. The rate of this complication for our practice is less than 1%. If this problem becomes recurrent, it may need further surgery to correct it.

**\*\*\*I understand that this problem has many factors, which may contribute to its incidence. \_\_\_\_\_**

**\*\*\*I understand that recurrent dislocations may need further surgery to correct the problem. \_\_\_\_\_**

### **Leg Length Inequality after surgery**

This is one of the most misunderstood problems after hip replacement surgery, and can be one of the more common reasons for frustration on the part of the patient. This problem is extremely complicated and really beyond the scope of a paragraph here. However, we want you to know that some of the reasons this may happen include pelvic obliquity prior to surgery, scoliosis (which is the reason for the pelvic obliquity), deformities about the knees, and an abnormal opposite hip. We use meticulous planning prior to surgery, and a caliper during surgery to measure the hip we are

operating on for intraoperative lengthening or shortening. We measure before we cut the bones, and we measure several times after all implants are in place. If a situation exists whereby we have an option of equal length but an unstable hip, we always choose making the hip slightly longer but stable. This situation comes up frequently. It is also important to understand that you will most likely learn to accommodate the length of your new hip over a period of at most one year. Also, we teach you how to do exercises to improve the flexibility of your pelvis to accommodate any discrepancies in the length of your legs. These exercises are effective 90% of the time, and if not a shoe lift in the opposite shoe is effective.

**\*\*\*I understand that leg length inequality after surgery has many factors, which may contribute to its incidence. \_\_\_\_**

**\*\*\*I understand that my surgeon may have to choose to make my leg longer during surgery to avoid dislocation problems. \_\_\_\_**

### **Pulmonary (Lung) Complications:**

The most common thing we surgeons see in their patients is a benign condition called *atelectasis*. This occurs in almost every surgical patient. *Atelectasis* is the main reason most surgical patients have fevers after surgery. This condition is usually resolved in 2 to 3 days.

More serious pulmonary complications may occur, such as pneumonia, but this is very uncommon.

**\*\*\*I understand that surgical patients almost always have fevers after surgery. The source of the fever is from the lungs 90% of the time. \_\_\_\_\_**

### **Stomach (Gastrointestinal) Problems:**

Stomach problems are uncommon but may occur. This includes bleeding ulcers resulting from the presence of blood thinners.

A condition called an *ileus* may occur, but it is unusual. (*Ileus is a condition where the bowels stop working for a few days.*) Should an *ileus* occur, a tube may be placed into your stomach for a few days until it resolves.

Patients rarely have gall bladder problems after surgery, but it has happened.

More serious GI problems may occur. This is rare but not impossible.

**\*\*\*I understand that stomach (gastrointestinal) problems may occur after surgery.**

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### **Urinary Complications:**

The inability to urinate after surgery is common. This is less likely when your surgeon inserts a Foley catheter at the time of surgery. Urinary complications resolve after a few days in almost all cases.

Infections in your bladder—urinary tract infections or UTI—may occur after surgery. If so, it is important to treat these aggressively so that you do not develop an infection in your artificial joint.

**\*\*\*I understand that urinary tract infections may cause an infection in my hip replacement. \_\_\_\_\_**

### **Mechanical Failure:**

Your implant longevity has been previously discussed. It is important for you to remember that implants sometimes fail after surgery, just as any mechanical part can fail. This is completely beyond the control of your surgeon.

**\*\*\*I understand that my THR is a mechanical device and that mechanical devices can fail prematurely. \_\_\_\_\_**

### **Nerve or Blood Vessel Injury:**

Nerve or blood vessel injuries are unusual but may happen. Even experienced surgeons may incur these kinds of complications during surgery or may recognize them after surgery. These kinds of complications are much more common in repeat surgeries because the surgical dissection is much more difficult when scar tissue is present. One of the problems that may result from a nerve injury is a “drop foot”. This will be an injury to the peroneal nerve either at the level of the hip or at the knee. This can result from normal traction on the tissues during surgery, or even pressure on the knee from braces that are applied after surgery. This may or may not resolve if it is present. Even more rare is an injury to the sciatic nerve. This may result in severe weakness of the entire lower leg below the knee, and numbness on your foot.

**\*\*\*I understand that nerve or blood vessel injury may not be recognized until after surgery. \_\_\_\_\_**

**\*\*\*I understand that nerve or blood vessel injury may require additional surgery to correct the problem. \_\_\_\_\_**

**\*\*\*I understand that nerve injury is possible during the normal course of surgery. \_\_\_\_\_**

### **Part 3: Special Situations and Conditions**

**Risk is increased if a patient has some of the conditions listed below. It is important to understand some of these.**

#### **Rheumatoid Arthritis:**

Patients with rheumatoid arthritis will have increased risks of infection, at least threefold. They will also have increased difficulty with wound healing.

**\*\*\*I understand that if I have rheumatoid arthritis, I will have as much as three times the risk of having an infection. \_\_\_\_\_**

**\*\*\*I understand that if I have rheumatoid arthritis, I will have increased difficulty with wound healing.**

**Psoriatic Arthritis:**

Patients with psoriatic arthritis have a greatly increased risk of infection compared to the general population with normal skin. The risk in these patients is increased at least threefold.

**\*\*\*I understand that if I have psoriatic arthritis, I will have a greatly increased risk of infection (at least three times as great) compared to the general population.**

**Post-traumatic Arthritis or Multiply Operated Hips:**

The more knee surgeries you have had prior to THR, the less likely you are to be satisfied with the results of the hip replacement. (Patients having hip replacement surgery because of arthritis in their knee resulting from an old injury fall into this category.)

**\*\*\*I understand that the number of previous hip surgeries I have had will make the results of THR surgery less satisfactory to me. \_\_\_\_\_**

**\*\*\*I understand that if I have arthritis in my hip that resulted from an old injury, I will be less satisfied with my THR surgery than the general population.**

**Prior History of Blood Clots or Pulmonary Embolism:**

People with a history of blood clots or pulmonary embolism have a significantly increased risk of having these complications after surgery. It is imperative that you inform your surgeon if you or anyone in your family had has these complications after surgery.

**\*\*\*I understand that I must inform my surgeon if I have had a history of blood clots or pulmonary embolism. \_\_\_\_\_**

**\*\*\*I understand that I must inform my surgeon if anyone in my family has a history of blood clots or pulmonary embolism. \_\_\_\_\_**

### **Prior Infection in Your Operative Hip:**

If you have had a previous infection in the hip that is about to be operated on, no matter how long ago, it will put you at increased risk for subsequent infection in your hip after THR.

**\*\*\*I understand that a previous infection in the hip that is about to be operated on, no matter how long ago that infection occurred, will put me at increased risk for subsequent infection in that hip after THR. \_\_\_\_\_**

### **Patients with Severe Arthritis or Significant Deformities:**

Patients with severe arthritis or significant deformities will be less likely to have an excellent result or outcome after surgery. Again, the earlier in the disease process you have the surgery, the more likely you are to recover quickly, to resume the activities you wish to, and to achieve an excellent result. Patients, who have waited until they can barely endure the pain, or who wait until they can hardly walk, will not do as well.

**\*\*\*I understand that my waiting until pain was unbearable or mobility almost impossible has put me at risk of having less than an excellent result. \_\_\_\_\_**

**\*\*\*I understand that hip surgery before the disease proceeds too far will have better results than if I wait. \_\_\_\_\_**

### **Regular Alcohol Usage and the Surgical Patient:**

Patients that drink alcohol on a regular basis will have an increased risk of complications. A large part of these can be reversed if the alcohol is stopped at least 2 weeks prior to surgery. These include abnormal lab functions, and decreased ability of the white blood cells to fight infection, as well as the ability to clot your blood to avoid abnormal bleeding. Alcohol is a potent and direct bone marrow suppressant. The bone marrow is where all your blood elements are formed. Alcohol withdrawal can be a very serious, even fatal problem in the postoperative setting. So it is critical that you be forthcoming to your surgeon regarding the amount of alcohol that you consume prior to surgery.

**\*\*\*I understand that regular alcohol usage can put me at increased risk for complications after surgery. \_\_\_\_\_**

**\*\*\*I understand that regular alcohol usage could cause me to have withdrawal in the post surgical period. \_\_\_\_**

**At this time I have the following questions for Dr. Bertram:**

**(Use this space below to write in any questions or specific points you would like to discuss with your doctor.)**

**I have no further questions for Dr. Bertram and feel very fully informed regarding the risks and complications of Hip Replacement Surgery.**

**Patient Name: \_\_\_\_\_**

**Surgeon: \_\_\_\_\_**

**Date: \_\_\_\_\_ Witness: \_\_\_\_\_**