

Information for my Patients having Total Hip and Knee Replacement

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***US News and World Report "Top Doctor"
One of "America's 125 Outstanding Knee Surgeons"
"Best Doctor in America"
"Best Doctor in the New York Metro Area"
New York "Super Doctor"
Castle Connolly "Top Doctor in America"***

***One of "America's 100 Great Orthopaedic Programs"
Joint Commission Gold Seal of Approval for Total Hip and Knee Replacement
US News and World Report "Best Hospital in New York"
HealthGrades "Orthopedic Care Excellence Award" Winner
HealthGrades "Best in Manhattan for Overall Orthopaedic Services"
HealthGrades "Best Quality for Total Joint Replacement"
UnitedHealthcare "Premium Specialty Center for Total Joint Replacement"
New York Magazine "Best Hospital in New York for Orthopaedic Surgery"
Aetna's "Institute of Quality for Orthopaedic Surgery"
DiversityInc.'s "One of the "Top 10 Hospital Systems in America"***

YOUR HOSPITAL AND SURGEON

Your surgery will take place at *Mount Sinai West*, located at 1000 10th Avenue between 58th and 59th Street, New York, New York, 10019. The main hospital telephone number is 212.523.4000. Valet parking is available at the main entrance.

Until early 2017, Dr. Harwin led the Total Joint Replacement Service at Mount Sinai Beth Israel. Under his leadership, it became the **only hospital in New York City** that was awarded the *“Joint Commission Gold Seal of Approval”* for its excellent outcomes and dedication to quality improvement for patients having Total Hip and Total Knee Replacement. It was named by *US News and World Report* and *New York Magazine* as a “Best Hospital in New York” and **HealthGrades** judged it “Best in Manhattan for Overall Orthopaedic Services”. **HealthGrades** awarded the hospital its “Orthopedic Care Excellence Award”. The Adult Reconstructive Service was named by **HealthGrades** as “Best Quality for Total Joint Replacement” and by **UnitedHealthcare** as a “Premium Specialty Center for Total Joint Replacement”. The hospital was named one of America’s *“100 Hospitals with Great Orthopedic Programs”* by Becker’s Orthopaedic Review.

Dr. Harwin has brought his entire team of over 10 professionals to Mount Sinai West and will continue to strive for the most outstanding outcomes.

PREPARATION FOR SURGERY AND MEDICAL CLEARANCE

Being evaluated medically before a major procedure like a joint replacement is critical in order to minimize complications during and after your surgery. Your medical clearance must include a physical examination, blood and urine tests, chest X-ray, electrocardiogram and possibly special testing for cardiac, pulmonary or vascular function. This critical step in your care will be carried out by either Dr. Harwin’s medical, cardiology and pulmonary colleagues who are on the staff of Mount Sinai or by the Mount Sinai West Pre-Admission Evaluation and Testing Center. They will speak with your primary care doctor or any specialists you have seen if necessary. **This assures that you will be prepared adequately for surgery and that all necessary tests and results reach the hospital in time. This avoids unnecessary cancellation of surgery.**

Patients scheduled for total joint replacement must attend our pre-operative class at the Mount Sinai West Pre-Admission Evaluation and Testing Center. It will provide you with the opportunity to meet some of the health care professionals who will care for you during your hospital stay. At the class you may inquire about private rooms, private duty nurses, and other services.

At the time of scheduling your surgery we will either make your appointment with one of Dr. Harwin’s colleagues, or if you are being cleared by the Mount Sinai West Pre-Admission Evaluation and Testing Center, they will contact you directly to schedule your class and pre-surgical testing on the same day. Their telephone number is 212.523.6424.

IMPORTANT: STOP THESE MEDICATIONS 7 DAYS BEFORE SURGERY. IF YOU DON'T, THE SURGERY MAY HAVE TO BE CANCELLED.

STOP Vitamin E, and all herbal supplements (garlic, ginkgo, ginseng, kava, St. John's wort, valerian, echinacea and ephedra, etc.).

STOP Anti-coagulants (blood thinners) such as Coumadin, Plavix, Pradaxa, Xarelto, Persantine, Ticlid, Aggrenox, etc. *Check with your primary care doctor to make sure it is safe for you to stop and if you need to be on a "bridge" medication like Lovenox.* If you cannot stop it, let us know right away. You may continue to take a baby aspirin if it for a cardiac condition (stent, etc.).

BLOOD MANAGEMENT:

I try to avoid blood transfusions if possible. Patients undergoing joint replacement procedures may require blood transfusion but with our protocol it is needed in less than 10% of patients. While you may want to donate a unit of your own blood my general recommendation is that it is not necessary to do so if your blood count is normal and the procedure is not especially complex. Patients who are having both hips or both knees done at the same time are at increased risk for needing a transfusion and we can discuss the options. To arrange for donating your own blood call the Mount Sinai West Blood Bank at 212.523.7248 and they will instruct you on how to go about it.

If you are a Jehovah's Witness and religious conviction will not allow you to receive blood transfusions or any blood products, please let us know. Administration of Epoetin (Pro-Crit) to increase your blood count and conservation measures such as a cell saver device and recovery drains may be needed. Please ask for a referral to our Bloodless Surgery Coordinator.

THE DAYS BEFORE, THE NIGHT BEFORE AND THE DAY OF SURGERY

In the days before the surgery, if you notice any evidence of infection on your body, such as cellulitis, boils, skin or mouth sores, rash, toothache, urinary burning or other such problems, you *must* call us. If you arrive at the hospital and we find evidence of infection, for your safety the surgery will have to be cancelled.

For 2 days before your surgery, and especially on the morning of surgery, shower and wash your body and the surgical area using **Hibiclens** (chlorhexidine) soap, in addition to your normal washing with soap or body wash. The Hibiclens soap removes bacteria on the skin and has been proven to reduce infection. It will be provided free of charge at the pre-operative joint replacement class and it is available without prescription at your pharmacy. In the weeks and months before your surgery completely quit or reduce your intake of alcohol, tobacco, drugs not prescribed by physician, and any other substances that may be harmful to your healing process. If you are overweight, please try to lose as much weight as you can before surgery.

IMPORTANT: Do not eat or drink after midnight before your surgery. However, you **should** take essential medications (such as medication for blood pressure, your heart, etc.) in the morning with the smallest amount of water. If you are diabetic do not take your normal medications since you are fasting.

You will be asked to arrive at the hospital about 2 hours before the procedure is scheduled. Please understand that while procedures are scheduled for a certain time, the time is an estimate. Operations may often take longer or shorter than planned. The hospital will call you the day before your surgery between 1 PM and 5 PM to advise you of the time to arrive.

Friends and family may wait in the Surgical Waiting Room. If you would like me to call someone after your procedure, please give the number to my nurse.

ANESTHESIA

For total hip and total knee replacement we recommend regional, not general, anesthesia. It is safe and effective and has been shown to reduce postoperative pain and complications. With this method, a tiny needle is placed in the back and a local anesthetic is given. The hips and legs become numb, so that no pain is felt. Then, intravenous sedation medication is given so that you will sleep. With this method there is no tube in the throat and you breathe on your own. Your recovery will be faster. However, in some cases a general anesthesia may be necessary instead, or in addition.

Before your operation, you will have the opportunity to discuss the type of anesthesia with the anesthesiologist. These are doctors who are highly skilled in modern orthopaedic anesthesia techniques, allowing us to perform even the most complex procedures under regional anesthesia with safety. These doctors are all Board Certified and stay with you throughout your surgery.

THE OPERATION, RECOVERY AND REHABILITATION

Rest assured that I alone perform your surgery! While I have a team of assistants helping me, each with their own special jobs to do, the surgical procedure itself is done by me; not by interns, residents or fellows. Before the operation begins, I will personally see you and talk with you.

On the day of surgery, several people, including myself, will ask you to identify the joint and the side of the body we are operating on (left or right or both). This is to make absolutely sure there is no misunderstanding. My nurse, assistant surgeon, physician assistants and anesthesiologist will all ask you the same question. This is normal procedure. I will write my initials "SFH" on the hip or knee we are operating on with a skin marking pencil.

I use a minimally invasive approach for all procedures. For hip replacements I use an "anterior" approach to the hip. We enter the joint anteriorly but the incision is on the

upper outer aspect of the thigh. For a knee replacement the incision is on the front of the knee. The incision will vary in length depending on your size, but rarely is it over 6 inches. It usually takes about 30 minutes to implant the prosthesis in primary cases. Revision surgery or more complex reconstructions involving hardware removal and other procedures will take longer. You will recover in our Post Anesthesia Care Unit (PACU) for about 2-4 hours and then be brought up to our orthopaedic floor. Physical therapy will begin depending on the time of day of the surgery, either the same day or the next morning. After 3-4 physical therapy sessions you will be ready for discharge, either the next day after surgery or the second or third day.

For total knee replacements early active and passive motion is necessary to prevent stiffness. For the first 6 weeks the only thing you should focus on is bending and straightening the knee and returning to normal activities as soon as possible. It is not necessary to go to a rehabilitation facility. In fact, most patients do better at home in their own environment. ***You should have at least 100° of knee bending (just over a "right angle") by 6 weeks after the operation (most will have 120° or more). If not, I will recommend "manipulation" of the knee in order to gain more motion and prevent permanent stiffness.*** This is done under anesthesia at the hospital and you go home the same day. It is not another operation; I just break up scar tissue by bending the knee for you. You must call us if your motion is not progressing since manipulation is safer and more effective if done within 3 months.

After routine hip and knee replacement, normal walking is encouraged as soon as possible using a cane. If a walker is needed initially, you should try to progress to crutches and then a cane as soon as possible. Hip replacement patients must use a cane for 6 weeks. Knee replacement patients may stop using the cane when comfortable. Most patients having joint replacement are recovered within 2-4 weeks, with physical therapy necessary for about 3 months.

My patients having total hip replacement will have no restrictions after surgery. Because of the less invasive, more stable anterior approach I use, you may move and sit with no restrictions. Many therapists are not aware of this so please follow my instructions no matter what the therapist says. ***Abduction exercises are begun 6 weeks after surgery. There are no exceptions to this!*** Again, many therapists are not aware of this. Make sure you show them my rehab prescription. It is not unusual to have a limp at 6 weeks after surgery. Once we begin the abduction exercises the limp will gradually lessen and almost always disappears. If abduction exercises are started too early and the muscles do not heal properly, a permanent limp can occur and even another operation to repair them may be needed.

OUT-PATIENT SAME DAY JOINT REPLACEMENT

Much has been written about and circulated on the internet about same day joint replacement surgery. It is possible but only in specifically indicated very healthy and well motivated patients. I am happy to discuss the process with you if you are interested in this approach.

A word of caution to all patients: Because of intense marketing by some surgeons regarding the “ease” of out-patient joint replacement many insurance companies are now insisting that patients are discharged no later than 23 hours after surgery. I disagree very strongly with this unreasonable and arbitrary decision by the insurance companies but in some cases they will not approve surgery for anything other than a 23 hour stay.

PEOPLE IN THE OPERATING ROOM

You will meet “*Team Harwin*” in the pre-operative holding area and the operating room. My team includes (among others) physician assistants, and OR nurses and OR scrub technicians, orthopaedic technicians and my assistant surgeon **Michael Wolfe, MD**. Because I am a designer of orthopaedic implants and instruments that are used world-wide (manufactured by *Stryker Orthopaedics*), I often have visitors in the Operating Room. These are surgeons and other professionals who have come to learn by **observing** my surgical techniques. With your permission, parts of your surgery may be recorded or photographed for teaching purposes. Of course, your privacy rights are respected and no individual identification is made. Only the surgical site is shown.

There are also manufacturers’ representatives present in the Operating Room. They do not participate in the surgery or operate any equipment. They are there for inventory and instrument support only.

COLD THERAPY FOR REDUCING PAIN AND SWELLING

All patients must order a motorized cold therapy unit for use after discharge. It reduces your pain and swelling, and speeds your recovery. I used a continuous cold therapy system when I had surgery and it worked even better than oral medications to relieve my pain, swelling and discomfort. Cold therapy will be provided while you are in the hospital but you must order a home unit for after discharge. The unit recommended is the CSZ Penguin Cold Therapy Unit (www.cszmedical.com). Before your surgery, please call 800.989.7373 to order the unit so that you will have it waiting for you when you arrive home after discharge. *You must identify yourself as a patient of Dr. Harwin’s in order to get a discounted price.* (Of course, you are free to choose any other similar unit.) *If you choose not to order the motorized unit, your outcome may well be compromised, with unnecessary pain, swelling and reduced motion.*

IMPORTANT INFORMATION ABOUT YOUR DISCHARGE FROM THE HOSPITAL

Plan to leave the hospital no later than the 3rd post-operative day. Our experience has shown that most patients with a single primary hip or knee replacement will go home, but some want to “go to rehab”. All patients are evaluated for either home or in-patient rehab when in the hospital; it cannot be arranged in advance. If authorization for “acute” in-patient rehab at Mount Sinai West is denied, you may still be accepted at a “sub-acute” facility; but you must understand that in many cases this is a nursing home environment. If your insurance company denies sub-acute rehab you will be discharged home with support services including a visiting nurse and home therapist. Please be assured that you

will not be discharged unless you are determined to be safe. *As I said previously, in my opinion, it is best for you to go home and recover in a familiar environment. We have partnered with services that supply a physical therapist to come to your home almost every day for 3 weeks after surgery. This depends on where you live and your insurance.*

PREVENTION OF COMPLICATIONS

Antibiotics are given routinely for all operations to help prevent infection. These are administered intravenously during the hospital stay. Let us know if you have any allergies or adverse reactions. Patients undergoing joint replacement must take medication (blood thinners) to prevent blood clots in the legs and lungs. Recommended as being effective: are Aspirin, Lovenox, Coumadin, Xarelto and others. My first choice for you is Aspirin. It is easy to take and has fewer side effects than other alternatives. You will take one enteric-coated 325mg aspirin tablet (Ecotrin or equivalent) twice a day, for 6 weeks. These medicines are started in the hospital after surgery and continued by you at home. The dosage and duration of treatment varies depending upon which drug we use and whether you had a hip or knee replacement.

In the hospital, compressive air "leggings" are worn to improve circulation and reduce blood clots. You won't need it at home. **If you had a hip replacement you must take Indocin (Indomethacin) for 14 days after surgery to prevent extra bone formation. With it we also prescribe medication to prevent stomach irritation (Prilosec or Nexium).** Indocin is very important in your recovery. If you cannot take it please let us know.

WOUND CARE

Unless there is a special circumstance, all wounds are closed with a "plastic surgery" (subcuticular) closure so no sutures are seen on the skin. A skin "glue" (Dermabond) seals the wound and a specialized dressing (Aquacel) is placed over it. The dressing protects the wound and promotes healing. It has a fiber pad treated with silver that is effective in keeping any drainage away from the wound and prevents contamination. This is generally left in place for you to remove at home about 5-7 days after surgery. It is completely waterproof so you may shower and wash with no problem. Once you remove the dressing you may still continue to shower and wash. The sutures dissolve slowly over time. Because the sutures are right under the skin, sometimes a suture can work its way to the skin and you can see and feel it. As long as there is no redness, separation, bleeding or drainage you need not worry. However, you must notify the office immediately if the wound becomes red, swollen or angry-looking, or if there is excessive drainage or pus. Call if you have severe pain or if you have a fever. If you feel that you must be seen immediately, go to the emergency department at Mount Sinai West or your local hospital.

SHOWERING, SWELLING, BRUISING AND NUMBNESS

As mentioned above, all patients can shower with the Aquacel dressing in place. Once it is removed, as long as the wound is dry and sealed you may continue to shower. If leakage or drainage occurs (other than a small amount of blood or yellow fluid) call our office.

Afterwards, the wound should be patted dry. Following your surgery, swelling of the thigh, knee, ankle and foot can occur and can persist for several weeks or months. In rare cases the swelling may be permanent. Bruising of the area of surgery ("black and blue") is common and to be expected. Rarely, blistering may occur. If swelling is accompanied by pain, especially in the calf, this could be a sign of a blood clot. Call us if you have concerns about your post-operative progress or have any questions. It is also common to experience some "numbness" about the incision area. This is especially common after knee replacement on the lateral (outer) side of the knee incision. This may persist for weeks or months. This usually gets smaller and gradually subsides, but in some cases it may be permanent. Numbness does not cause any functional problem.

PAIN MEDICATION

Upon discharge, patients typically receive a prescription for a codeine-containing painkiller like Percocet, Vicodin, Hydrocodone, Oxycodone, etc. If you are allergic to codeine or aspirin, please let us know and we will substitute other drugs. Most patients will take codeine medications for up to 6 weeks after surgery, transitioning to Tylenol or Tramadol. If codeine medications are needed after 3 months I will recommend a consultation with a pain management specialist.

RETURNING TO WORK, DRIVING AND TRAVEL

Since everyone's occupation is unique regarding specific duties, mode of travel, and distance it is impossible to make absolute predictions about when to return to work. Generally, you may return to work as soon as you are comfortable and some will return in about 2-3 weeks. If your job requires standing for long periods, heavy lifting or a lot of walking, then 6-12 weeks may be needed. Joint replacement patients may begin to drive and travel at 3 weeks. Walking and going up and down stairs will not damage the joint or your surgery. All patients should try to resume normal activities, including walking outside, as soon as possible. When fully recovered, most patients can return to recreational leisure and sports activities.

OFFICE FOLLOW-UP

Because there are no sutures or clips to remove it is not necessary to be seen earlier than 6 weeks after surgery unless there is a problem with your range of motion or if the wound is draining or not healing. Routine follow-up appointments are at 6 weeks, 3 months, one year, three years and 5 years. On your first post-operative visit ask us for your Joint Replacement Wallet Card. Your wallet card will identify you as a joint replacement patient should the need arise for security screening. It describes the maker of your implant and your surgical procedure. **For the first year after surgery you should take antibiotics before any surgical procedure, extensive dental work or any other procedure where bleeding is anticipated. After that, discuss with Dr. Harwin.**