A Patient’s Guide to
Spine Surgery
YOUR PATHWAY TO RECOVERY
A Patient’s Guide to Spine Surgery

DEVELOPED BY
Interdisciplinary Patient Family Centered Education Committee

SPECIAL THANKS TO
Members of the Spine Service

ABOUT HOSPITAL FOR SPECIAL SURGERY
Founded in 1863, Hospital for Special Surgery (HSS) is a world leader in orthopedics, rheumatology, and rehabilitation. HSS has received Magnet Recognition for Excellence in Nursing Service from the American Nurses Credentialing Center and has one of the lowest infection rates in the country. For the last three years HSS has received the HealthGrades Joint Replacement Excellence Award. A member of the NewYork-Presbyterian Healthcare System and an affiliate of Weill Cornell Medical College, HSS provides orthopedic and rheumatologic patient care at NewYork-Presbyterian Hospital/Weill Cornell Medical Center. All Hospital for Special Surgery medical staff are on the faculty of Weill Cornell Medical College. The Hospital’s research division is internationally recognized as a leader in the investigation of musculoskeletal and autoimmune diseases.

HOSPITAL FOR SPECIAL SURGERY
535 East 70th Street
New York, NY 10021
TEL 212.606.1000
hss.edu

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Dear Patient:

Welcome to the Spine Care Institute at Hospital for Special Surgery. We are very pleased that you have chosen to have spinal surgery here. We are committed to making your surgery and recovery comfortable and successful.

We are pleased to provide you with this comprehensive overview of your planned spinal surgery. This manual will act as your guide through the perioperative period. We urge you to read and refer to it frequently. Please bring it with you during any perioperative visits.

Additional information and patient education materials are also available for your review on our website at www.hss.edu/spine.

Members of the Spine Care Institute are dedicated to improving spinal surgery. We are active in the development of newer and less invasive techniques to help facilitate a rapid recovery. For those of you who are participating in our clinical research studies, we thank you. We welcome all comments and input, which will help us improve our spinal surgery protocols.

On behalf of all the members of the Spine Care Institute, it is our hope that this educational booklet will help answer many of your questions regarding your condition and treatment. We also hope it will make your experience a pleasant one.

Please feel free to contact the patient education staff at 212.606.1263 if you have any questions or require additional information.

Todd J. Albert, MD
Surgeon-in-Chief and Medical Director

Frank Schwab, MD
Chief, Spinal Service

Jack Davis, MSN, RN, ONC
Manager, Patient Education Programs
# Table of Contents

**Before You Come to the Hospital**
- Important Phone Numbers .................................. 3
- Schedule of Follow-Up Visits .............................. 3
- A Closer Look at Spine Surgery ........................... 4
- Before You Come to the Hospital ......................... 9
- Diet ..................................................................... 13
- Preparing Your Home ........................................ 21
- When You Come to the Hospital ......................... 22

**Your Surgery and Hospital Stay**
- The Day of Surgery ........................................... 23
- Recovering in the Hospital ................................ 30
- Managing Pain .................................................. 30
- Rehabilitation in the Hospital ......................... 37
- Precaution Guidelines: Do’s and Don’ts .......... 39
- Preparing to Return Home ............................... 46

**Final Steps: At Home**
- Guidelines for Recovering at Home .................. 47
- Preventing Infection ......................................... 47
- Physical Therapy: Regaining Independence
  - with Activities of Daily Living ....................... 48
- Medical Equipment Order Information ............. 50
- Strategies to Reduce Post Operative Swelling ...... 51
- Sexual Relations .............................................. 52
- Additional Discharge Instructions .................... 55
- Conclusion ..................................................... 56

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Before You Come to the Hospital

Important Telephone Numbers

<table>
<thead>
<tr>
<th>Service</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital for Special Surgery, Main Building</td>
<td>212.606.1000</td>
</tr>
<tr>
<td>Admitting</td>
<td>212.606.1241</td>
</tr>
<tr>
<td>Patient Education</td>
<td>212.606.1263</td>
</tr>
<tr>
<td>Case Management</td>
<td>212.606.1271</td>
</tr>
<tr>
<td>Nursing Call Center</td>
<td>212.606.1710</td>
</tr>
<tr>
<td>Pastoral Care</td>
<td>212.606.1757</td>
</tr>
<tr>
<td>Access Private Nursing Service</td>
<td>212.774.7187</td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>212.606.1221</td>
</tr>
<tr>
<td>Food and Nutrition Services</td>
<td>212.606.1293</td>
</tr>
</tbody>
</table>

Schedule of Follow-Up Visits

Expect to have routine follow-up visits at your surgeon’s office. The follow-up schedule may vary slightly from patient to patient, and from surgeon to surgeon. You must call your surgeon’s office to schedule the appointments. Please notify us if you have a change of name, address, telephone number, or insurance carrier.
To understand spine surgery, you should be familiar with the structure of the spine. The spine consists of 33 bones called vertebrae that provide body structure and protect the spinal cord. Linking the vertebrae are intervertebral discs and facet joints that absorb shock and allow for movement and flexibility. As people age, the discs between vertebrae lose water, decreasing the ability of the discs to cushion the spine. This process is called disc degeneration and can reduce the space through which nerves exit, called the intervertebral foramen.

These diagrams illustrate some of the important structural components of the spine.
TYPICAL SPINE PROBLEMS

**Bulging Disc**
A bulging disc occurs when one of the discs between the vertebrae develops a weak area which causes painful pressure on the spinal canal.

**Ruptured or Herniated Disc**
Pressure causes the outer rings of the disc to rupture and the soft nucleus to squeeze through. This compresses and irritates the spinal nerve root.

**Arthritis**
Aging, worn vertebrae and discs allow bone spurs to form. This causes or worsens narrowing of the spinal canal (stenosis), and irritates the nearby nerve, producing pain.

**Instability**
As a disc degenerates and flattens, vertebrae slip back and forth. This irritates the spinal joints and creates or worsens stenosis, irritating the nerve.
**Scoliosis**
Scoliosis is a condition of the spine in which the spine curves to varying degrees in an "S" shape, either to the right or left side. There are three types of scoliosis: Idiopathic (of unknown origin); Congenital (in which the bones are asymmetrical at birth); or Neuromuscular (in which the scoliosis is due to a symptomatic condition, such as cerebral palsy, muscular dystrophy, or paralysis).

**Spinal Stenosis**
Spinal Stenosis is a condition that arises due to narrowing in and around the spinal canal, thus resulting in nerve pinching, which leads to persistent pain in the buttocks, limping, lack of feeling in the lower extremities, and decreased physical activity. There are several different types of spinal stenosis which can effect all regions of the spine (cervical, thoracic, and lumbar spine).

*Your surgeon will direct you to a specific website on hss.edu to review information concerning spinal conditions and surgery.*
**TYPICAL KINDS OF SPINE SURGERY**

**Discectomy**
A discectomy is the surgical removal of disc material which has herniated, causing pressure on the nerve root or spinal cord. Your surgeon will remove the central portion of the disc, called the nucleus pulposis, thereby releasing the stress on the nerve.

**Laminectomy**
A laminectomy is the removal of a portion of the lamina (the boney roof of the spine). This allows more room for the nerves of the spine and reduces the irritation and inflammation of the spinal nerves. The lamina does not grow back. Instead, scar tissue grows over the bone, replacing the lamina protecting the spinal nerves.

**Laminotomy**
A laminotomy is decompression of only one side of the spinal canal (left or right). In this procedure, a small portion of the laminar roof over the spinal canal is removed, leaving the majority of the lamina intact.

**Microsurgical Laminoplasty**
A microsurgical laminoplasty is the decompression of the spinal canal using microsurgical techniques.

**Fusion**
For people whose spines are not stable, the surgeon places bone graft between two or more vertebrae in order to promote the bone to grow or fuse together. The bone used for bone graft is usually taken from the bones of your own body (pelvis) at the time of surgery. This bone graft acts as the cement that fuses the vertebrae together. Occasionally rods, screws, or plates are used in addition to bone graft.
**Anterior Lumbar Spinal Fusion**
The anterior (or frontal) approach provides excellent access to the spine and enables your surgeon to restore a collapsed disc space. An incision is made in the left or right flank region of the abdomen and a portion of the disc space is removed and replaced with an implant.

This can sometimes be combined with a Posterior Fusion (from the back) which would be used if a more rigid stabilization of the spine is required.

**Cervical Spine/Neck Surgery**
Surgery on the cervical spine may be performed to either decompress or relieve the pressure on the spinal cord or to help stabilize the cervical spine. There might be a need for a fusion to add stability to the cervical spine. Cervical fusion may be approached from the front of the neck (anterior) or the back of the neck (posterior). Bone graft may or may not be used to help stabilize the graft site. The bone graft may be allograft (donor bone) autograft (your own bone) or bone graft substitute.

Your surgeon can describe your particular spinal operation to you. Please feel free to ask questions about what your surgery involves.
Before You Come to the Hospital

THINGS TO DO

1. Before your surgery, the surgeon’s office staff will make an appointment for you with a medical physician at HSS who will:
   • Take your medical history, perform a physical examination, and review and/or perform any necessary diagnostic tests.
   • This may or may not include other specialists such as a neurologist, pulmonologist, hematologist, or cardiologist. The specialist will make specific recommendations in order to optimize your general condition prior to surgery.

2. Unless you are told otherwise, continue to take medicines already prescribed by your own physician.
   • Fish oils should be discontinued one week prior to surgery.
   • Anti-inflammatory medications, nutritional supplements (vitamins, herbals, minerals, iron, and calcium) should be discontinued seven days prior to surgery (your doctor will advise you).
   • Your doctor may ask you to stop hormonal replacement and birth control pills one month prior to surgery.
   • Your doctor will advise you what other medications you should take.
   • Consult your physician regarding aspirin products. Patients with cardiac stents should continue to take their aspirin (81 mg.). Depending on the type of cardiac stent, Plavix may need to be discontinued (talk to your doctor about this).

All patients must call the hospital’s pre-surgical information line at 212.606.1630 and listen to a pre-recorded message as soon as possible, prior to your scheduled surgery, for general instructions and a review of the pre-hospital process.
3. The surgeon’s office staff will also **make an appointment for you for pre-surgical testing** approximately 7 to 14 days prior to surgery where:
   - The pre-surgical screening staff will perform routine diagnostic testing so you can be cleared for surgery, including taking a blood sample for testing, a urine specimen, a chest x-ray, and an electrocardiogram (EKG).
   - You should bring a list of current medications and a detailed account of prior medical, surgical, and family health history.
   - The nursing staff will request information as part of a comprehensive medical history to add to your patient database profile.
   - The nursing staff will provide instruction on preparation for surgery.

4. The surgeon’s office staff will **make an appointment for you to attend the pre-operative patient education** class. The class is approximately 60 to 90 minutes long. During the class, patient educators will:
   - Review the surgical process.
   - Discuss setting realistic expectations, patient safety, mobility, pain management, and the prevention of complications (infection and blood clots).
   - Provide instruction on bowel and skin preparation.
   - Provide information about:
     - Nutrition and diet restrictions before surgery;
     - The preoperative patient phone call and how patients obtain general pre-surgical information;
     - The staff phone call to the patient the day before surgery with detailed and specific preparation instructions;
     - The time and place to arrive for surgery; and
     - Discharge planning.

5. During your class you will instructed in muscle strengthening and clot prevention exercises. You should start these exercises one week prior to surgery.
6. You may wish to review and plan your post-hospital care with **Case Management Services** (212.606.1271) before admission. The **Pre-Admission Program** offers patients and their families the opportunity to receive assistance before the patient is admitted for surgery. This program enables you to begin understanding and planning your hospitalization and your discharge needs in a timely, comprehensive manner. It helps you maximize your options and make decisions in a more relaxed way.

7. Prepare for your return home from the hospital.

8. Before your admission, please complete the **Health Care Proxy** form authorizing another person, designated by you, to make decisions with your physician about your care, should this become necessary.

9. A nurse from the **Nursing Call Center** will contact you one business day prior to your surgical date, between the hours of 1PM and 7PM (Friday for Monday surgical cases) with more detailed instructions.

10. The night before your surgery and two hours after your dinner, administer your Fleet enema (per your doctor’s direction).

11. The surgical area should be washed with the antiseptic soap solution at the end of your last bath or shower before surgery. The solution should be rinsed and removed after application. Specific instructions will be provided through the pre-surgical screening appointment, the pre-operative education class, and pre-operative phone call.

12. A Call Center nurse will review when you should stop eating and drinking, but realize that it is likely that **only clear fluids** (no milk products) **after midnight** (i.e., water, ginger ale, black coffee or tea) will be allowed on the day of your surgery and **nothing** should be consumed three hours prior to your surgical time. A detailed pre-operative nutritional guideline is described in this booklet and will be reviewed during the pre-operative education class.
13. For patients who have Sleep Apnea and use a Sleep Apnea device, please bring your mask attachment and a record of the settings you normally use. Please DO NOT bring the Sleep Apnea machine. Patients with Sleep Apnea are generally required to stay overnight in the Post-Anesthesia Care Unit (PACU) to be monitored and observed.

14. The use of nicotine products (i.e., cigarettes, cigars, gums, or patches) has been shown to increase risk of complications following surgery. They can inhibit bone and wound healing by decreasing blood flow to the surgical site. They can also increase the risk of deep vein thrombosis (DVT, a.k.a. blood clots). Please discuss smoking cessation with your doctor. You will be provided with a pamphlet in the class and you can also find it online at: http://www.hss.edu/conditions_smoking-cessation-for-healing.asp

15. You and your family will be instructed to go to the Family Atrium on the 4th Floor of the hospital.

16. If you wish to have a private nurse during your hospital stay, the hospital can arrange this service for you. Please call 212.774.7187.

**Extremely Important**

Always have a list of your current medications and the dosages so that the correct medication and dosage can be prescribed for you while you are in the hospital. You should also have contact information for your local physician, (name, phone and fax number) and any details on medical information, allergies, or past reactions to anesthesia.

Be sure you understand all preoperative instructions. If you have questions or concerns, please discuss them with your surgeon or call the HSS Patient Education team at 212.606.1263. For more information, go to www.hss.edu and click on “Patients & Visitors”.
Diet

PREPARING FOR SURGERY

One Week Prior to Surgery

• Stop all nutritional supplements (vitamins/minerals including iron and calcium)

The Day Before Surgery

• Follow a Low Fiber Low Residue Diet on the following pages (refer to “recommended foods” and “sample menus”)
• Do not eat any solid food after midnight

Day of Surgery

• Take CLEAR FLUIDS ONLY up to 3 hours before surgery OR up until ARRIVAL AT THE HOSPITAL. Do not eat or drink anything after arriving at the hospital.
DAY BEFORE SURGERY: LOW FIBER/LOW RESIDUE DIET

The Low Fiber/Low Residue diet is to be used the day before surgery. A low fiber/low residue diet reduces the amount of waste that moves through the intestines, which is helpful in preparing for surgery. This diet is not nutritionally complete, and is intended to be used for a short duration only.

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Recommended Foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk and dairy</td>
<td>Milk or lactose-free milk; almond, rice or soymilk; yogurt (plain or vanilla), soy yogurt (plain or vanilla flavor); cottage cheese, cream cheese, ricotta cheese and aged cheese; ice cream or frozen yogurt; butter or margarine</td>
</tr>
<tr>
<td>Meat and other proteins</td>
<td>Ground or tender, well-cooked lean meats, poultry, fish, eggs and soy prepared without added fat</td>
</tr>
<tr>
<td>Grains</td>
<td>Enriched white bread and rolls; white rice, noodles, pasta, and cooked potatoes (no skin); plain crackers; farina, cream of wheat, and grits; cold cereal: Rice Krispies, Puffed Rice and Corn Flakes</td>
</tr>
<tr>
<td>Fruits</td>
<td>Fruit juice without pulp; canned or cooked fruits without skins or seeds; ripe banana; soft cantaloupes, honeydew melons, seedless watermelon; peeled apple</td>
</tr>
<tr>
<td>Vegetables</td>
<td>Strained vegetable juice; most well cooked or canned vegetables without seeds and skin, such as potato without skin, tomato sauce, pureed spinach, green beans, carrots and asparagus tips; iceberg lettuce</td>
</tr>
<tr>
<td>Beverages</td>
<td>Water, apple or cranberry juice, coffee, tea, carbonated drinks; bouillon or strained broth</td>
</tr>
<tr>
<td>Fats, snacks, sweets and condiments</td>
<td>Vegetable oil, butter, margarine, ketchup, vinegar, mayonnaise; plain cookies and cakes; fruit ice, jello, custard, jelly (seedless), honey, sugar or syrup</td>
</tr>
</tbody>
</table>
## FOODS TO AVOID

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Milk and dairy</strong></td>
<td>Yogurt or ice cream with nuts, seeds or fruit; more than 2 cups daily from milk and dairy group</td>
</tr>
<tr>
<td><em>limit to 2 servings daily</em></td>
<td></td>
</tr>
<tr>
<td><em>(check package for serving size)</em></td>
<td></td>
</tr>
<tr>
<td><strong>Meat and other proteins</strong></td>
<td>Legumes (dried beans), nuts, nut butters, seeds and tough fibrous meats</td>
</tr>
<tr>
<td><strong>Grains</strong></td>
<td>Whole grain, whole wheat, rye, cornbread or pumpernickel bread; breads made with nuts, seeds or fruits; whole wheat pasta; whole grains such as brown rice, buckwheat, bulgur, oats, corn and kasha, whole grain cereals, bran cereals, granola-type cereals, and cereals with nuts, seeds, coconut or dried fruit</td>
</tr>
<tr>
<td><strong>Fruits</strong></td>
<td>All other raw fruits including berries, citrus fruits, grapes, pears and pineapple; prunes and prune juice; dried fruit</td>
</tr>
<tr>
<td><strong>Vegetables</strong></td>
<td>ALL raw or partially cooked vegetables AND beets, broccoli, cauliflower, brussels sprouts, cabbage, sauerkraut and corn; greens (mustard, turnip, spinach, collards); lima beans, peas, mushrooms, okra, onions, parsnips, peppers, potato skins, tomatoes and winter squash</td>
</tr>
<tr>
<td><strong>Beverages</strong></td>
<td>Limit milk and dairy products to 2 servings per day</td>
</tr>
<tr>
<td><strong>Fats, snacks, sweets and condiments</strong></td>
<td>Any made with whole grain flour, bran, seeds, nuts, coconut or dried fruit; nuts, seeds, and popcorn</td>
</tr>
</tbody>
</table>
### SAMPLE LOW FIBER/LOW RESIDUE DIET

#### GENERAL

**Breakfast**
- ½ cup apple juice
- ¾ cup corn flakes
- 1 slice white toast
- 1 tsp margarine
- 2 tsp jelly
- 1 cup lowfat milk
- Coffee/tea

**Lunch**
- 1 cup chicken noodle soup
- 3 oz lean hamburger on bun (white, no seeds)
- 1 cup vanilla yogurt (no fruit/seeds) OR 1 cup lowfat milk
- ½ cup canned peaches
- Tea

**Dinner**
- ½ cup cranberry juice
- 3 oz chicken breast
- ½ cup mashed potato
- ½ cup well cooked green beans
- 1 slice white bread
- 1 tsp margarine
- ½ cup applesauce
- Tea

**Breakfast**
- ½ cup orange juice (strained, no pulp)
- 1 cup cream of wheat
- 1 scrambled egg
- 1 slice white toast
- 1 tsp margarine
- 2 tsp jelly
- 1 cup lowfat milk
- Coffee/tea

**Lunch**
- ½ cup grape juice
- 3 oz lean roast beef
- Baked potato (no skin)
- ½ cup well cooked carrots
- 1 small white dinner roll
- 1 tsp margarine
- 1/2 cup canned pears
- Tea

**Dinner**
- 3 oz baked fish
- ½ cup white rice
- ½ cup well cooked asparagus tips
- 1 slice white bread
- 1 tsp margarine
- ½ cup Italian ice
- Tea

**Snack**
- 1 cup lowfat milk
- 4 graham crackers
LACTOSE RESTRICTED AND DIABETIC

Breakfast
1 scrambled egg
1 slice white toast
1 tsp margarine or butter
1 cup cream of wheat or farina
½ cup apple juice
coffee/tea

Lunch
1 cup chicken noodle soup
3 oz turkey
2 slices white bread
1 tsp mayonnaise
½ cup soft melon or cantaloupe
tea

Dinner
3 oz baked fish
½ cup white rice
½ cup well cooked green beans
1 white dinner roll
1 tsp margarine or butter
½ cup canned peaches in natural juice
tea

Snack
5 vanilla wafers
1 cup soymilk or 1 cup Lactaid milk
DAY OF SURGERY: CLEAR FLUID DIET (ANY MEAL)

ALLOWED
• Water
• Apple, Cranberry & Grape Juice
• Gatorade
• Black Coffee or Tea
• Clear Broth
• Ginger Ale and Seltzer
• Jello and Italian Ice

NOT ALLOWED
• Milk or Dairy Products (including in coffee and tea)
• Citrus Juices
• Prune Juice
• Juices with Pulp
• Any food or beverage not listed in the “allowed” column
MyPlate

MyPlate is the current nutrition guide published by the United States Department of Agriculture. It helps you to choose a healthy meal plan. It is divided into sections of approximately 30% grains, 30% vegetables, 20% protein and accompanied by a smaller circle representing dairy. MyPlate emphasizes portion control while providing the necessary nutrients you need and the right amount of calories to maintain a healthy weight.
During your hospital stay, eat balanced, nutritious meals with adequate calories and protein to help your body heal and replenish proteins depleted by surgery.

Eating well can also help reduce the risk of complications such as infection or poor wound healing. After surgery, patients may be placed on a liquid diet for 1 to 2 meals as the effect of anesthesia on intestinal function wears off. Your nurse and physician will be able to progress your diet to solid foods when you are ready. Not having a bowel movement for 2 to 3 days following surgery is normal.
Preparing Your Home

Prior to surgery, you will need to prepare your home for recovery. During the first few weeks at home you will begin to adapt what you learned in the hospital to your own setting.

- Store items within easy reach. Take items you may need out of low cabinets or shelves prior to surgery because you will not be able to reach them after surgery.
- Prepare meals ahead of time and store in the freezer. Have your favorite home delivery numbers handy!

Safety Checklist

☐ Reduce clutter.
☐ Remove loose wires and cords.
☐ Rugs should be smooth and anchored to the floor.
☐ Place non-skid tape or mats at the sink.
☐ Use a night light in the bathroom.
☐ Turn on lights when you get up at night.
☐ Secure rugs and treads on the stairs.
When You Come to the Hospital

A Checklist for an Average Two Night Stay

☐ A legal picture identification (i.e., driver's license, passport, birth certificate, social security card, green card/permanent resident card, military i.d.)

☐ Your hospitalization insurance cards

☐ X-rays or laboratory reports (if instructed by the staff)

☐ A cane, if you use one, for your therapist to evaluate

☐ Your completed Health Care Proxy form

☐ Paperwork, including consent forms, sent to you by your surgeon. Also bring a list of your current medications with dosages, and medical information from your physician.

☐ This manual: *Total Knee Replacement: Your Pathway to Recovery*

☐ Non-slip, flat, supportive athletic or walking shoes

☐ Personal toiletries

☐ A small amount of money for newspapers

☐ One credit card for TV, telephone rental, to purchase necessary medical equipment, or for transportation services

☐ A book, magazine, or hobby item to occupy time

☐ Eyeglasses, NOT contact lenses

Please Do Not Bring

☐ Medications including narcotic substances (unless instructed by your HSS pharmacist). Self-medication during your hospital stay may lead to unsafe conditions like overdoses and or drug interactions.

☐ Valuables (except those mentioned above)

☐ Jewelry: Remove and leave at home all piercings and jewelry, including wedding rings to ensure your safety during surgery. Otherwise, they may need to be cut off.
Your Surgery and Hospital Stay

The Day of Surgery

Traveling to HSS

The hospital is located at 535 East 70th Street on the Upper East Side of Manhattan, between the East River and York Avenue. For physicians, patients, and families visiting from out of town, the hospital is readily accessible by automobile and taxi via all of the major bridges and tunnel routes. Garage parking is available nearby; street parking is subject to local restrictions.
On the Day of Surgery
On the day of your surgery, you will arrive several hours before your procedure is scheduled to begin. We respectfully request that only one visitor accompany you on the day of surgery. We may ask additional visitors to wait in our main lobby.

The “Holding Area”
You will begin your day in a Pre-Surgical “Holding Area” where dedicated staff will help prepare you for surgery. A locker will be provided for your belongings, but please leave any valuables at home. All belongings should fit into one small bag. This includes all jewelry, as you will be asked to remove it before entering the operating room. You will be asked to change into a hospital gown, and will be assigned to a private or semi-private room in the Holding Area. One member of your family can be with you during this time. A nurse will start an intravenous line to give you fluids, and if you are a woman of child-bearing age, you will be asked to provide a urine specimen for a pregnancy test.

Preoperative Exam
A physician’s assistant will take your history and perform a physical exam. The main purpose of this examination is to see if anything has changed since you last saw your medical or surgical physicians. You will be asked to confirm what type of surgery you are having and to sign consent for that surgery if you have not already done so. While in the Holding Area, your surgeon will come to speak with you and sign your surgical site. This is simply a safeguard to confirm where on your body the surgery will be performed. At this time, you will also meet your anesthesiologist, who will discuss the anesthesia you will receive.
Anesthesia

Your anesthesiologist will be a Board-Certified or Board Eligible physician who is highly specialized in caring for patients having spine surgery. Having previously reviewed your chart, laboratory results, and other studies, your anesthesiologist will already know much about you. However, he or she will have a detailed conversation with you to clarify any issues and address any concerns you, or your anesthesiologist, may have. Your anesthesiologist will also explain the type of anesthesia you will receive, including any special monitoring or necessary care, and discuss post-operative recovery and pain management. Earlier consultation with our Anesthesia Department can easily be arranged by your surgeon or at your request.

Essentially all patients undergoing spine surgery at Hospital for Special Surgery will receive general anesthesia, which involves being put to sleep with medications that are given to you through your intravenous line. However, the types of medications your anesthesiologist administers during your surgical anesthesia will be specifically suited for spine surgery and compatible with intra-operative neurological spinal cord monitoring. Oftentimes, the choice of medication given during general anesthesia may impact your recovery and pain management after the surgery. Some of the considerations your anesthesiologist will take into account include the length of surgery, other health conditions, any pain medications you may have been previously taking, and any side effects you have had from previous general anesthetics.
The Operating Room: Surgery/Anesthesia

After your consultation with the anesthesiologist, you will be taken to the operating room by a nurse. Once there, your anesthesiologist will measure your blood pressure and heart rate and will begin giving you sedative medication. Soon after initiation of general anesthesia, your anesthesiologist will insert a breathing tube, which is necessary and essential for your safety during surgery. In certain instances, your anesthesiologist may decide to insert the breathing tube under light sedation in order to ensure that you are breathing well and/or to minimize stress on your spine. The surgery will begin after a deep stage of anesthesia has been achieved.

Typically, the breathing tube is removed at the end of surgery; however, following longer or more involved spine surgery, your anesthesiologist and surgeon may decide to leave the breathing tube in place for several hours after the surgery. During this time, your body has time to recover from the anesthesia as well as the surgery and other physiologic changes that may have occurred. If this is the case, you will be closely monitored in the recovery room and kept comfortable by appropriate sedation. With some of the more involved spine surgeries your surgeon and anesthesiologist may perform a “wake up test.” This is usually accomplished by having you follow a simple command, such as “wiggling your toes” or “moving your feet” as the anesthesia is wearing off. It is not difficult or uncomfortable, but it is something you may notice.

Recovery Room

After the surgery, you will wake up in the recovery room. Your initial recovery from the surgery and anesthesia will be in our recovery room, also called the post-anesthesia care unit (PACU). In our PACU there will be an attending anesthesiologist, 24 hours a day, who will closely follow your recovery and post-operative care. You will also have a dedicated nurse caring for you. Several hours after surgery, as you become fully awake, you will be seen by your surgeon and your family members will be allowed to visit. Later in the day, you will be moved to your in-hospital room. Depending on your medical history and the
extent of the spine surgery, your anesthesiologist may have you spend the first night in the PACU where there is continual monitoring of your vital signs and you receive the direct care of the PACU anesthesiologist and PACU nurses.

**Spiritual Support**

HSS formally recognizes the role that spiritual support can play in coping with and recovering from physical illness. To help meet your spiritual and emotional needs, HSS provides a Chaplaincy Service as an integral part of the healthcare team. The chaplains are here to serve you and your family and can provide pastoral support in any faith. Please call 212.606.1757 to contact the Pastoral Care Office.
Visitation Guidelines

Patients may communicate to Hospital staff any restrictions they wish to place on visitation. Patients may also designate a person to make visitation decisions on their behalf.

Visiting hours for the inpatient units are from 11AM to 9pm. We request that only two adult visitors (14 years and older) visit a patient at one time. For our pediatric patients, the Hospital permits 24 hour visitation by one parent or other designated adult companion.

Visiting hours for the Post Anesthesia Care Unit (PACU) on the 1st, 4th, and 9th floors vary by location. Please ask your healthcare professionals for specific information.

Recovery Area visiting hours are 15 minutes long and take place at 11:30AM, 2:00PM, 4:00PM, 6:00PM, and 8:00PM. You may visit a patient staying overnight in the Recovery Area at 9:00AM the following morning.
Recovery Area Visitation Guidelines

In order to promote a serene and healing environment for our patients, we ask that all visitors observe these guidelines:

• Patient Liaisons must accompany you to the Recovery Area.

• Please wear your visitor pass in a visible place at all times.

• Before the visit, you will receive an A, B, C, or D designation from a Patient Liaison. The letter represents the location in the Recovery Area where the patient is recuperating.

• Visits are 15 minutes in total. One visitor is permitted at the patient’s bedside.

• No food, drinks, flowers, or gifts are permitted in the Recovery Area.

• Cell phones must be OFF while in the Recovery Area to prevent any interference with medical equipment.

• Only children aged 14 or older are permitted in the Recovery Area and on patient floors.
Recovering in the Hospital

Managing Pain

There will be some level of pain following all orthopedic surgeries. The Anesthesia Department works closely with patients and uses a multidisciplinary approach to aggressively manage post operative pain. This includes a variety of different pain medications and physical therapy.

With the exception of some of the less extensive spine surgeries, your orthopedic spine surgeon will request the consult of our Department’s Acute Pain Service (APS). The APS is a specialized team consisting of an anesthesiologist, a nurse trained in pain management, and a pharmacist. A combination of different pain treatments are incorporated, depending on the type of discomfort you experience as well as the side effects to which you may be sensitive.

How Does it Feel?

Pain management begins with you. Since no objective tests exist to measure what you are feeling, you must help the staff by describing the pain, pinpointing its location, and judging its intensity, as well as reporting any changes. Pain may be constant or sporadic, as well as sharp, burning, tingling, or aching. A pain scale is used to help you and the staff gauge the level of pain and effectiveness of treatment.

People used to think that severe pain after surgery was something they “just had to put up with.” While it is reasonable to expect some discomfort following surgery, the current treatment options greatly reduce the level of pain most patients have.

Your description will help us provide you with a plan of care. Even under your personal Pain Management Program, your pain level may change at times. Be sure to tell your nurse if it becomes worse.
You will be asked to rate how much pain you have on the Pain Scale below:

**PAIN SCALE**

<table>
<thead>
<tr>
<th>No Pain</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Worst Pain Ever</th>
</tr>
</thead>
</table>

**Your Treatment Plan**

Pain control following surgery is an important part of your care. The pain management team will use a multi-faceted approach to manage your pain. This may include a combination of oral medications, injections, IV medications, and catheters connected to computerized pumps with a button that is controlled by the patient (Patient Controlled Analgesia or PCA). We try to refrain from giving injections, but sometimes this is unavoidable. The goal is to try to recognize and treat your pain quickly, which allows you to participate in the exercise program.

The plan is to transition you to oral pain medications. Usually the oral pain medication is an opioid or narcotic, but whenever possible, an anti-inflammatory medication will be ordered as well. This transition is usually a smooth one, enabling you to progress with your activities with minimal discomfort.

If you have had a spinal fusion operation your surgeon may request that you refrain from taking anti-inflammatory medications for a period of time following surgery. Inflammation is part of the healing process and these medications may slow your fusion healing process.

Every patient’s experience is unique. So, if you need pain medication, tell your nurse as soon as the pain starts. Keep in mind that your pain is easier to control if you do not allow it to become severe before taking pain medication. Usually medications are available every three to four hours as needed. Sometimes turning and repositioning can relieve pain, so let the staff know about what makes you more comfortable.
Regardless of which pain relief method is started, **if you are not getting pain relief, please notify your nurse or doctor.** We want you to be as comfortable as possible while you heal. Being able to participate in your own recovery activities is a goal of the recovery process.

**What is Patient-Controlled Analgesia (PCA)?**
PCA is a type of pain medication delivery system which utilizes a microprocessor (computerized pump) to give a prescribed amount of medication at desired intervals. This pump is prepared and programmed for you at Hospital for Special Surgery by an anesthesiologist. A special pain management team consisting of anesthesiologists, nurses, and pharmacists supervises your use of the medication.

The pump is programmed to deliver a pain medication either when you push the button (demand dose) or by a continuous flow (basal rate). It is attached through your intravenous line during your surgery. It is called “Patient Controlled” because, if needed, you can press a button attached to the pump to give yourself a dose of pain medication.

Precautions against an overdose have been incorporated into PCA. The pump is programmed to deliver the dose of pain medication requested only when it is safe to do so. There is an hourly limit of medication...
available. The PCA system automatically records both the doses delivered and denied. Your nurse checks this machine frequently and records the amount of medication used. If your pain is not relieved by using your PCA, tell your nurse. The nurse can call the anesthesiologist or other members of the pain management team who will check on you and adjust the medication or PCA settings as needed.

The nurses regularly check on you to evaluate your level of pain relief and assess for side effects. An anesthesiologist visits daily when you are on the PCA pump, even if your pain management is going well. If any problems arise, an anesthesiologist is on call 24 hours a day, 7 days a week.

**Oral Medication**
When you are able to tolerate it, you will be given oral pain medication to control any discomfort and pain.

**About Your Pain Medications**
Medications used to control pain are carefully prepared by our own HSS pharmacists to assure quality and safety. Some of these medications include opioids like dilaudid (hydromorphone) and morphine.
Deep Breathing
It is extremely important to perform deep breathing exercises after surgery to rid your airway and lung passages of mucus. Normally, you take deep breaths almost every hour, usually without being aware of it, whenever you sigh or yawn. When you are in pain or are drowsy from anesthesia or pain medication, your breathing may be shallow. To ensure that you take deep breaths daily, the nursing staff will provide you with a device called an incentive spirometer, along with instructions on its use.

HOW TO USE THE INCENTIVE SPIROMETER

1. With the unit in an upright position, place your lips tightly around the mouthpiece and exhale normally.

2. To achieve a deep and sustained breath, inhale at a rate sufficient to raise the ball in the chamber.

3. Exhale. After performing the exercise, remove the mouthpiece from your lips.

4. Relax and breathe normally for a moment after each deep breath.

5. Repeat this exercise 10 times every hour.
**Preventing Blood Clots**

After surgery, blood clots, called deep vein thromboses (DVT), may form in the leg veins. In rare cases, these leg clots travel to the lungs, where they may cause additional symptoms. To prevent and reduce the incidence of clot formation, mechanical devices (foot or calf pumps) are used while you are in the hospital to squeeze the leg muscles, thus maintaining blood flow in the veins.

**Leg Swelling**

For the first month after your lumbar spinal surgery, prolonged sitting with your legs in the down position will tend to worsen swelling of the feet. Try not to remain in one position for longer than 45 minutes at a time. Periods of walking should be alternated with periods of elevation of your legs. Lying down for an hour in the late morning or afternoon will help reduce swelling and give your body the rest needed for healing.
Exercise
Gentle exercises to improve your range of motion can help prevent circulation problems as well as strengthen your muscles. Very soon after surgery, a physical therapist will teach and review your exercise program, as outlined in the “Mobility Throughout Your Hospital Stay” section of this book.

Physical Therapy
• Participate in physical therapy daily.
• A physical therapy schedule is available by 9AM seven days a week. Ask your nurse when you are scheduled for therapy so you can be prepared and ready to participate.

Patient Safety and Falls Prevention
• Always ask for assistance from a staff member when getting out of bed.
• Always use your call bell: “Call, Don’t Fall”
• HSS has developed a Safety and Falls Prevention pamphlet that you should read. If you don’t already have one, ask your nurse or therapist for a copy.

Bathroom Privileges
• Once you are able to tolerate being out of bed for at least 20 minutes, you will be safe to use the bathroom with a staff member’s assistance.
• If possible, use the bathroom prior to physical therapy so you can use your treatment session to improve functional mobility.
• Bedside commodes or bedpans are alternatives to getting out of bed to use the bathroom.
Rehabilitation and Mobility After Spine Surgery

Your rehabilitation program will begin once you are medically stable and there are orders from your doctor to begin post-operative mobility. This is based on the type of spinal surgery you have had. You might be getting out of bed a few hours following surgery. For some patients, rehabilitation will begin the day of surgery, for others it will start the day after surgery. Everyone will begin rehabilitation within 24 hours of surgery or per your surgeon’s plan.

It is critical to understand that motivation and participation in your physical therapy program is a vital element in the success of your surgery and your overall recovery. It is imperative that you play an active role in your recovery and rehabilitation from the start!

Rehabilitation Team

The rehabilitation team consists of:

- Physical Therapists
- Physical Therapist Assistants
- Occupational Therapists
- Mobility Technicians

The goals for physical therapy are to:

- Help regain independence with mobility.
- Establish an independent home walking program.
- Educate on proper body mechanics and spine precautions.
- Assist with discharge planning.
**Beginning to Walk**

**Walking is the #1 exercise following any spinal surgery.**

Your therapist will assist you in sitting up with your feet over the bedside (we call it dangling). You will then stand with the use of a walker and the continued help of your therapist.

As the days progress, you will increase the distance and frequency of walking. Most patients progress to a straight cane within a few days after surgery.

**Looking Ahead**

Before leaving the hospital, you will be instructed in a home exercise program.

**Remember, you make the difference!**

Your participation in a physical therapy program is essential to the success of your surgery. The more committed and enthusiastic you are, the quicker your improvement will be.

Physical Therapist: ________________________________

HSS Inpatient Rehabilitation Department: 212.606.1221
Precaution Guidelines

Understanding the Dos and Don'ts Following Spinal Surgery

Precautions are in effect during your recovery period, which is approximately six weeks. Maintain your precautions until they are discontinued by your surgeon.

**Do**

1) Do listen to your body while performing functional movements or activities. Gradually increase your activity level, being sure to also rest as needed during the day. Know what your limits are.

2) Do walk and gradually progress the distance and frequency as tolerated.

3) Do wear your brace if prescribed by your surgeon.

4) Do sit in a sturdy chair with arms in order to ensure good posture.

**Don’t**

1) Don’t lift heavy objects. Be sure object weighs less than five lbs (e.g. one gallon of milk).

2) Don’t force any extremes of motion, especially with bending, twisting, or rotating.

3) Don’t sit for more than 30-45 minutes at a time.

4) Don’t spend a prolonged time in any position during the day. Change positions frequently to avoid discomfort and strain on your back.

5) Don’t sit in low, soft chairs or recliners.
Back Precautions

NO BLT’S (NO Bending, Lifting, Twisting)
After Back Surgery

DO THE WORK OF GETTING UP WITH YOUR LEGS, AND KEEP YOUR BACK STRAIGHT.

DON’T TWIST AT YOUR WAIST.

DON’T BEND AT YOUR WAIST.

DO WALK. ACTIVITY WILL EASE YOUR PAIN AND HELP WITH HEALING.

DON’T LIFT ANYTHING THAT WEIGHS MORE THAN A GALLON OF MILK.
Proper Positioning After Your Spinal Surgery

Sleeping Positions

- Pillows under head
- Pillows under knees

- Pillow under head
- Pillows or blanket between knees
Mobility Throughout Your Hospital Stay

Exercise
• You can perform ankle pumps and quad sets while in bed
• 10 repetitions of each exercise every hour
• It is normal to experience some stiffness and mild soreness in various muscles while you exercise as your body adapts.

1) Ankle Pumps: Purpose: To promote blood circulation in the lower legs
• Lie on your back with both legs straight.
• Bring your feet upwards, “toes to your nose,” moving them from the ankle.
• Now point both feet downwards, like pressing on a gas pedal.
• Make sure to move the feet and ankles up and down through the full range of motion.

2) Quadricep Set: Purpose: To help strengthen the front thigh muscles (quadriceps).
• Lie on your back with a small towel under the knee on the operated side. A towel under the knee is optional, and may improve comfort.
• Slowly tighten your thigh muscle (quadriceps) by pushing the back of your knee down into the bed.
• Do not let your heel come off the bed.
• Hold this contraction for five seconds, and then slowly release.
• Rest between each contraction.
Sitting Position

- Do not sit for more than 30-45 minutes at a time.
- It is important that you start sitting out of bed for short periods of time as soon as you can tolerate it.
- Be sure that feet are supported on the floor.
- Support your spine on the back of the chair or with a pillow.

It is important to change positions throughout the day. Avoid prolonged time spent in any position during the day.

REMEMBER! Do not get out of bed without assistance!!
Transfers

A “log rolling” technique will be used to get in and out of bed:

Bend your knees

Roll to one side

Push yourself up using your arms

Your physical therapist will also instruct you in sit-to-stand transfers from your bed/chair as well as tub/shower and car transfers.
Ambulation

Walking will be one of the major focuses of physical therapy.

- **Walking is the main exercise after spine surgery**
- **Avoid hills, ramps, and uneven surfaces**

Walking will begin with a rolling walker, and you will progress to a cane or no device when you are comfortable and safe. Safe negotiation of stairs will also be reviewed prior to your discharge home. It is helpful to have a handrail to hold onto for safety.

Occupational Therapy

In order to prepare you for returning home, an Occupational Therapist will instruct you in functional activities, such as bathing, showering, and toileting.

General information can be found in the *Rehabilitation Network* section of the www.hss.edu website.
Preparing to Return Home

The majority of patients who undergo spine surgery are discharged from the Hospital once they reach their discharge goals. Many patients are discharged home following their hospitalization. Other patients who require additional rehabilitation for medical reasons, living arrangements, or to become more independent, may be transferred to a rehabilitation center following their hospital stay.

How the Hospital Can Help

As soon as you decide to have spinal surgery, you must look ahead and plan for discharge and home recovery. Preparing enables you to concentrate on your main task—getting well. To help you plan for discharge and home recovery, the Hospital’s Case Management Department is available at your request.

A Case Manager is available to you prior to surgery to address any concerns you may have about your discharge from the Hospital. The case manager will review the alternatives available to you based on your medical condition, home and healthcare needs, care arrangements you have already made, geographic location, insurance coverage, and financial situation.

Some of the ways the Hospital Social Work Case Manager can assist you include:

- Helping you to cope with illness or disability
- Discharge planning
- Long-term planning
- Assessing your eligibility and advising you on benefits you may be entitled to, including SSI (Supplemental Security Income), SSD (Social Security Disability), Medicaid, and New York State Disability

The Social Work Case Manager will discuss your post-discharge needs in consultation with your surgeon and other members of your primary healthcare team. Your involvement is essential in formulating a discharge plan that will suit your needs.
Final Steps: At Home

Guidelines for Recovering at Home

Please do not hesitate to contact your surgeon with any questions you have about the following instructions.

Consult with your internist about duration and dosage of iron (ferrous sulfate) after your discharge.

Caring for the Surgical Site

1) A clean, dry dressing can be applied over the incision until your staples, sutures, or steri-strips are removed. The surgical wound may be open to air, unless a brace is ordered. A light gauze dressing with paper tape may be placed over the wound to protect it.

2) After suture or staple removal, leave the incision uncovered unless instructed otherwise.

3) Please inform your surgeon if you notice increasing redness or drainage from your incision.

Pain Medication

1) Take your pain medication as prescribed.

2) To control pain, take your pain medication before the pain becomes severe.

3) If your pain medication seems weak or you are experiencing unpleasant side effects, do not hesitate to call your surgeon’s office.

4) If you are taking pain medication, avoid alcoholic beverages.

5) It is important to notify your surgeon’s office if you require additional pain medications. It will take a few days to mail you a new prescription, so call the surgeon’s office before your supply runs too low. Call when you have one week’s supply, to be safe.
Physical Therapy

If you experience discomfort during your ongoing physical therapy, take your pain medication at least 45 minutes prior to your subsequent therapy sessions. This will allow enough time for the medication to take effect.

1) Walking is the main exercise when you leave the Hospital; monitor the walking distance and gradually progress distance and frequency as tolerated.

2) Use long-handled devices if you need to, in order to avoid excessive strain on your body.

3) A referral will be made for a home physical therapist on an as-needed basis.

4) At your follow-up visit, your surgeon will determine if you need to have outpatient physical therapy. This can be provided at HSS, if you can arrange transportation to our physical therapy center on 70th Street. If this is not convenient, we can make a referral for outpatient physical therapy at a physical therapy center in your community. To obtain services at these facilities, you will need a prescription from your surgeon, and in most cases, authorization from your insurance provider.

Activities of Daily Living (ADLs)

TOILETING
A raised toilet is recommended for ease of getting on and off the toilet and to ensure you’re comfortable.

SHOWERING
You are allowed to shower once your surgeon has cleared you to do so. Please follow the instructions provided by your surgeon’s team in order to protect your incision.

Your physical therapist will be able to provide you with instructions and tips on showering according to your bathroom set-up.
**SHOES**
Rubber-soled shoes that can be slipped on are recommended because you will be unable to bend over to tie your shoes after surgery. Elastic laces are available for sneakers so that they can be more easily slipped on.

**DRESSING**
The use of adaptive equipment for dressing may make you feel more comfortable and will allow you to maintain your precautions.

- sock aide
- elastic shoelaces
- shoe horn
- reacher
- long handled sponge
Medical Equipment Order Information

Biodynamic Technologies has been supplying HSS and its patients with medical equipment for many years. However, you can also find these items in your local surgical supply store if you prefer.

If you would like to use Biodynamic Technologies, you can call 1.800.879.2276 to order medical equipment that you will need after your Hospital stay. The equipment will be delivered to you during your Hospital stay, or it can shipped to your home.

Payment must be made at the time of delivery by cash, check, or credit card. If you do not see what you need, please ask.

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoe Horn</td>
<td>$9.40</td>
</tr>
<tr>
<td>Long-Handled Sponge</td>
<td>$8.40</td>
</tr>
<tr>
<td>Stocking Aide or Sock Aide</td>
<td>$11.50</td>
</tr>
<tr>
<td>Easy-Up Cushion</td>
<td>$50.00</td>
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<tr>
<td>Elastic Shoelaces</td>
<td>$5.00</td>
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<tr>
<td>Shower Chair with Back</td>
<td>$85.00</td>
</tr>
<tr>
<td>Standard Reacher</td>
<td>$16.95</td>
</tr>
<tr>
<td>Gel Cold Pack, Standard</td>
<td>$26.95</td>
</tr>
<tr>
<td>Gel Cold Pack, Oversized</td>
<td>$40.00</td>
</tr>
</tbody>
</table>
Strategies to Reduce Postoperative Swelling

Swelling is common after surgery. The more swelling you have, the more pain you may have, and the more difficult it may be to move. Therefore, it is important to minimize the harmful effects of swelling to enhance your recovery.

To reduce swelling, apply cold therapy to the surgical site for the first two weeks for 20 minute intervals. After two weeks, ice for 20 minute intervals before and after walks, when soreness or pain is present, or after exercise.

If you advance your activity too quickly or overdo it, your neck or back may become more swollen.

Here are some suggestions that will help reduce swelling if it occurs:

• Daily naps, during the late morning or late afternoon, are helpful in enabling your body to heal.
• Move your ankles up and down (ankle pumps).
• Limit your sitting time to 45 minutes to an hour at any given time. Get up, walk around, and then return to sitting.
• Ice your neck or lower back—ice may be in the form of ice chips or cubes wrapped in bags or towels, or commercial cold packs.
Sexual Activity Following Spinal Surgery

Patients and their partners may have concerns about sexual relations after spinal surgery. The following information may answer some questions, but please feel free to ask your surgeon, physical therapist, or nurse if you have other concerns.

**Will I be able to resume sexual activity?**
The vast majority of patients are able to resume safe and enjoyable intercourse after spinal surgery. However, as you know, the spine is an integral part of many forms of intercourse. Therefore, following spine surgery, you must review the process.

**When can I resume sexual intercourse?**
Time must be allowed for the surgical incision and muscles within your back to heal and the pain to alleviate or disappear. However, there are various types of spinal surgery, and rates of recovery from each may vary. You should not resume intercourse by any method that utilizes your back until your doctor gives you permission. Do not hesitate to discuss your concerns regarding your readiness.

**What positions are safe for me during intercourse?**
Proper body alignment, which should be observed during all activities of daily living, also governs sexual intercourse. You must avoid twisting or bending your back. So first, think about how this affects your present method(s) of intercourse. If a change is necessary, begin thinking about alternatives. There are, of course, many ways of providing sexual gratification to both persons.

**What should I tell my partner?**
Good communication between you and your partner is essential, because both of you may have to adopt new position(s) for intercourse. We suggest you discuss this with your partner before the time arises. Review how proper body alignment of your back limits movement, and
how it affects position(s) for intercourse you have traditionally used. Perhaps you can discuss practical alternatives in advance. In any case, bringing up the subject early will make adopting new methods easier when the time comes. You may want to experiment.

**Take the initiative!**
To have concerns about sexual activity after spinal surgery is completely normal. Your eventual method(s) must protect your back, while providing pleasure for you and your partner. We hope that you will feel comfortable in taking any new initiatives necessary to meet your mutual needs. However, if you or your partner have questions, please feel free to discuss them with your surgeon, nurse, or physical therapist.

**Finding a “Safe” Position**
Following spine surgery, every safe position for sexual relations must be based upon maintaining proper body alignment. Note the practically of the positions below. Just as importantly, note how the person who has had back surgery utilizes pillows and/or folded towels to help maintain proper body alignment. Think about how you can adopt them to help set up and maintain proper alignment in your desired positions.

Note the folded towel under his back, the cushion under the knees, and the pillow under the head to maintain alignment and comfort. She is supporting her weight and controlling movement with her arms and legs. The partner must obviously restrain from stressing his back with too much motion.
In this illustration, the folded towel under the stomach and the support under each of her spread legs helps to maintain alignment. The partner supports their own weight and controls their movement with their arms and legs. Restraint should be exhibited to prevent jarring the back.

Note that while lying on the side, the pillow is underneath the head, the towel is under the waist, and pillows are under the upper knee to help maintain a comfortable body alignment. The partner’s weight is not a problem, but again, restraint should be used to prevent jarring of the back.
Additional Discharge Instructions

- You may have physical therapy at home if it is prescribed by your surgeon. If so, the physical therapist will come to your home and will advance your exercises and walking program as tolerated.

- Gradually increase your walking distance daily. A daily walking program on level surfaces is an essential component of your home exercise program. Avoid hills, steep ramps, and uneven surfaces.

- Once your mobility has improved, you may consider continuing physical therapy at an outpatient physical therapy center to continue to increase strength and endurance.

- You can stop using your assistive device when you can walk relatively pain-free and without a limp, or when advised to do so by your physical therapist or surgeon.

You will receive additional information regarding physical therapy from your surgeon’s office.
Conclusion

The Patient Education staff and members of the Spine Service at HSS hope that you find this booklet helpful on your journey to recovery. Spine surgery is indeed a journey. Its endpoint—improved health and mobility—is well worth the effort. We stand ready to assist you every step of the way. If you have any questions, please feel free to ask any member of our staff. Your well-being is our first concern. We encourage you to seek out additional information that is located on the HSS website at www.hss.edu. There will be many opportunities to review the material provided in this booklet. During each visit, the staff will reinforce the information and will likely provide additional and more specific instructions. In addition, our Patient Education staff will review the information during the pre-operative education class and will respond to any questions that you may have.

Can We Help Someone Else?

Now or later, you may have family members or friends who may need the services of an orthopedist (in any specialty area) or a rheumatologist. An easy way for them to get in touch with Hospital for Special Surgery is to call the HSS Physician Referral Service at 1.800.854.0071.
Providing Feedback to HSS

You may be able to help us!

As you may know, Hospital for Special Surgery has achieved a national reputation for excellence in orthopedics, rheumatology, and patient-centered care. All of us on the HSS team strive to provide you with the care you need to achieve the best health outcomes.

Feedback from our patients has been a critical component in achieving this excellence. We listen. And we respond especially when we learn of new opportunities for further improvement.

But another important part of achieving excellence is to know when things go right! We also want to know when our staff members provide outstanding care.

When you have a moment to reflect, we would appreciate your feedback. You can, of course, send a letter or note to any HSS staff person, or to your doctor. You already know your doctor’s address. He or she appreciates hearing from you.

To address a Hospital staff person whom you know, you can write to that person at the Hospital’s address below. Or, you can contact us through the Hospital’s website. Otherwise, please feel free to address your feedback to:

Louis A. Shapiro, FACHE
President & Chief Executive Officer
Hospital for Special Surgery
535 East 70th Street
New York, NY 10021

Thank you for choosing Hospital for Special Surgery for your surgery.