



Hoag Orthopedic Institute Spine Surgery Guide

Hoag
Orthopedic
Institute



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Welcome to Hoag Orthopedic Institute

Thank you for choosing Hoag Orthopedic Institute. We are one of the top orthopedic specialty hospitals in the United States. Our surgeons operate on more than 1,200 patients a year performing more than 5,200 procedures. Most spine patients have multiple procedures performed during surgery. It is the combination of our surgeon and clinical staff's expertise, patient-centered focus, dedication to quality care and healing environment that create successful patient outcomes.

As you prepare for your spine surgery, you will probably have a number of questions. This booklet is designed to answer some of those questions and guide you from pre-surgical preparation through the post-surgical healing process. We hope that the following pages will enable you to get you back to you. You will also receive an invite from GetWell Loop to guide you through your HOI experience.

At Hoag Orthopedic Institute, *We Get You Back to You.*



Frequently Used Numbers

Hoag Orthopedic Institute Main Phone Number

949-727-5010

Pre Admission Screening – Nurse Navigator

949-727-5010, option 3

Hoag Orthopedic Institute – Nursing Floors

Second Floor: 949-727-5200

Third Floor: 949-727-5300

Advanced Directive Information – Patient Representative

949-727-5151

Care Management

949-727-5439

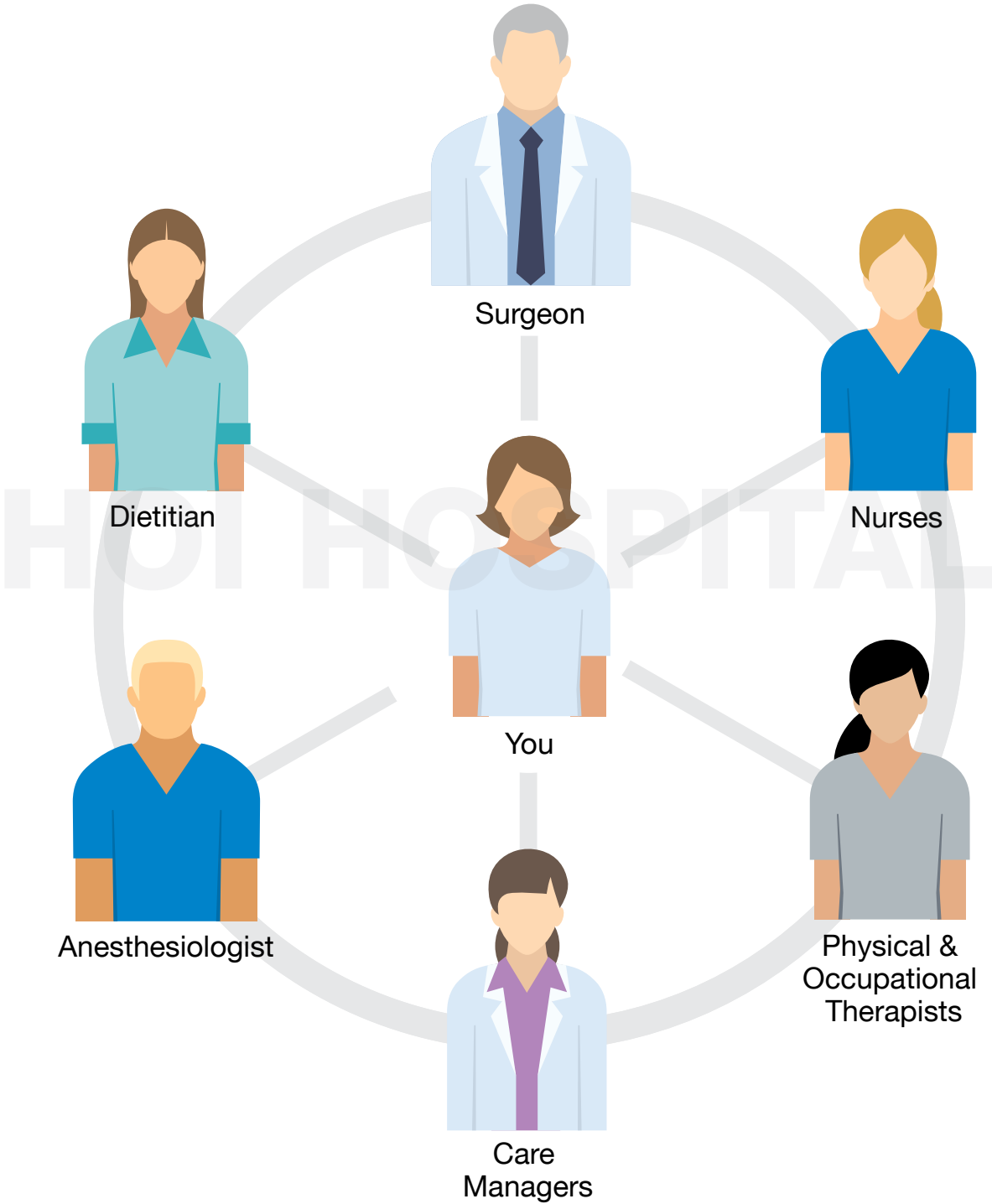
HOI HOSPITAL

Your electronic medical record is available in MyChart. Accessing MyChart will provide you with your Pre-operative and Post-operative information.

You can access your MyChart by visiting hoagorthopedicinstitute.com and selecting “Patient Portal” on the top navigation.

Patient Centric Care

You are now part of our team of professionals working together to meet your goals



Medical and Professional Staff

Anesthesiologist

A physician that is responsible for your anesthesia (putting you to sleep) throughout your surgery.

Orthopedic Surgeon

A physician/surgeon that performs your spine surgery and directs your care. This doctor guides your rehabilitation and follows you through office visits.

Physician Assistant (PA)

A health care professional that works with your physician to prescribe, diagnose, and treat health care problems. Physician assistants often see you before, during, and/or after spine surgery.

Nurse Practitioner (NP)

A registered nurse with advanced skills and education that works with your surgeon to manage your care. An NP can diagnose and treat health care problems. An NP can prescribe medications, order, and interpret needed tests. Nurse practitioners often see you before, during, and/or after your hospital stay.

Registered Nurses (RNs)

Professional nurses that are responsible for managing your care throughout your time at HOI. Nurses use the surgeon's instructions to guide your care. RNs provide education to you and your family about your health and safety needs. This includes information before and after surgery and helps you plan for your discharge from the hospital. RNs also provide care and education in your surgeon's office.

Nurse Navigator

A registered nurse that follows prescriptive guidelines to transition the patient through the continuum of care, providing education, care coordinator, and pre-optimization to prepare the patient and improve patient outcomes.

Physical Therapist (PT)

A therapist that plans your physical rehabilitation after your spine surgery. This therapist will help you learn to move properly and walk safely. You will learn how to use assistive devices such as a walker or cane, if necessary, which will be needed temporarily after your surgery. Sometimes patients will attend physical therapy after surgery to learn exercises to build strength and flexibility.

Occupational Therapist (OT)

A healthcare professional that is responsible for planning safe ways for you to complete your daily activities, such as bathroom hygiene. The OT may partner with the physical therapist (PT) to complete your exercise routine. The OT offers ideas to assist you in creating a safe home environment. Adaptive equipment is used to simplify self-care tasks and protect your spine while conserving energy.

Care Manager/Discharge Planner

A registered nurse or social worker who works closely with your surgeon and the other team members to help you make decisions about your discharge plan. This may include home health physical therapy, outpatient therapy, home equipment, and/or any skilled nursing care or Acute Rehabilitation Unit placement if needed. The care manager/discharge planner can also answer your questions about insurance coverage for services and equipment.

Preparation

Arrange for Home Care

Before going into the hospital, consider the support system you will have when you return home. You will need some assistance for the first few weeks with cooking, bathing, housekeeping, shopping and driving errands, etc, depending on what type of surgery performed.

If an adequate support system at home is not available you may need to hire a caregiver. If you have further questions, please call Care Management at 949-727-5439.

Visitors During Your Hospital Stay

We understand the importance of visitors for our patients' emotional, mental and spiritual well-being. Visiting hours are open with quiet healing time from 2 p.m. – 4 p.m. and after 9 p.m., we allow time for our patients to rest and restore themselves. Therefore family, friends and clergy may visit whenever they wish. Please be advised, however, that visitors may be asked by staff to leave, especially if a patient needs rest. Any visitor with symptoms or signs of a communicable illness or disease should not visit the hospital. Also, any visitor (including children) should keep noise levels at a reasonable volume.

HOI HOSPITAL

Please visit our website
hoagorthopedicinstitute.com/visitors for current information about visitors during the hospital process.

Understanding the Spine

Your physician has diagnosed your spine problem and recommends surgery as the best treatment option for you. Knowing the anatomy of the spine may help you to understand the reason you are going to have spine surgery and what you can expect afterward.

A healthy spine or vertebral column provides support for the body and protection for the spinal cord. It also allows you to move freely because of the three natural curves of the spine which keep your body balanced. Strong, flexible muscles and ligaments support the spine and keep the curves in normal alignment. Spine problems often start because of poor posture and/or sedentary lifestyle. Moving incorrectly also puts extra stress on the spine and discs.

The bones, or vertebrae, are stacked one on top of each other. Soft, cushioning discs, which act as shock absorbers, are located between each vertebrae allowing the spine to bend and move. The discs are made of a tough outer lining called the annulus, and a jelly-like center called the nucleus. The movement of fluid within the nucleus allows your vertebrae to rock back and forth on your discs, giving you the flexibility to bend and move. The shape, size and flexibility of your discs change throughout the day.

When the normal curvature of the spine is changed, there may be excess stress on structures, such as the bones, ligaments and

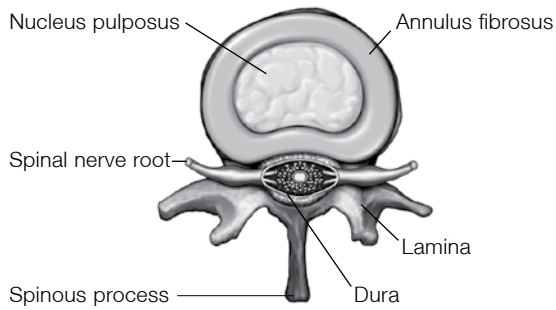
discs. Disc degeneration occurs because of a gradual and progressive loss of water content in the nucleus of the disc. The result is a loss of elasticity, the disc becomes narrow and the vertebrae shift closer together potentially causing compression to the nerve. Worn out or injured discs can lead to a variety of other spine and disc problems. The most common problems happen when discs tear, bulge or extrude, losing their ability to cushion and absorb shock. The rest of the spine may degenerate leading to pain, stiffness and other symptoms.

Other spinal conditions that may require surgery are: spinal stenosis, spondylolisthesis, bone spurs and scoliosis. Spinal stenosis occurs when the vertebral canal, nerve root canals or intervertebral foramina become narrow causing irritation of the nearby nerves, congenital or due to spinal degeneration. Bone spurs can develop, which can encroach upon, or narrow the spinal canal or spinal foramen. Scoliosis is a lateral, or side to side, curvature of the spine, which can lead to disc degeneration and/or compression of the internal organs. Spondylolisthesis (a slippage) is a displacement of one spinal vertebrae compared to another.

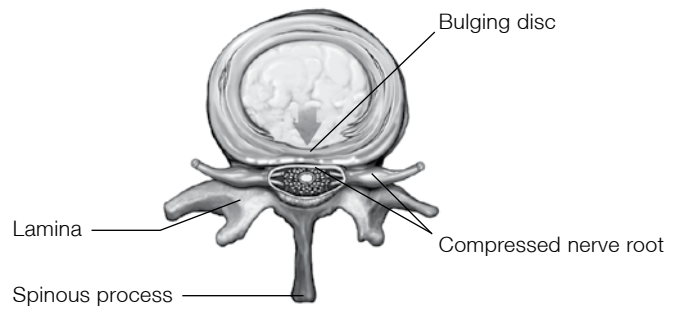
Surgery may be necessary to help correct any of these conditions. It is important to remember that proper exercise and good body mechanics will help your spine to heal and significantly reduce the risk of further injury.

Diagrams of the Spine

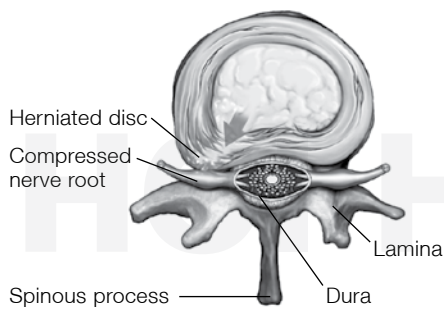
Normal spinal disc



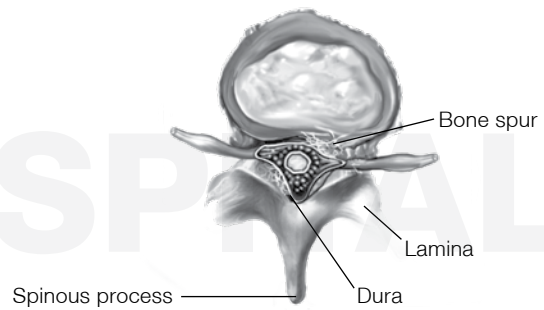
Bulging or protruding disc



Extruded disc



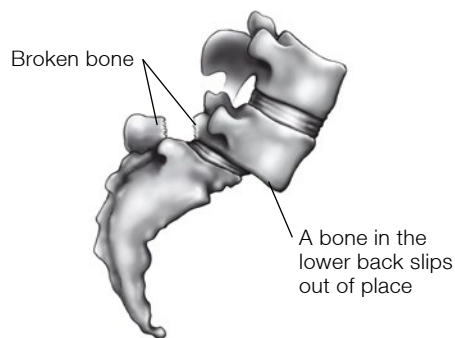
Bone spur



Normal spine



Spondylolisthesis



Scoliosis



Glossary of Terms

Disc: Soft cushions located between each vertebrae. The disc acts as a shock absorber for the vertebrae. Each disc contains a jelly-like center called the nucleus and an outer lining called the annulus.

Annulus: Tough outer lining of the vertebral disc. The annulus contains nerve fibers that can cause pain when injured or irritated.

Nucleus: Fluid (jelly-like) center of the vertebral disc.

Facet: A joint located between the vertebrae.

Foramen: An opening between vertebrae. The spinal nerves exit through the foramina and branch out to other parts of your body.

Fusion: Stabilization of two or more vertebrae to correct instability, fusion can be performed with bone grafts and metal components.

Lamina: Part of the vertebrae that covers the spinal cord and nerves in the back of your spine.

Herniated disc: (Also referred to as “ruptured disc” or “slipped disc.”) As a disc bulges, the nucleus moves closer to the edge of the annulus. Sudden movement or injury can rupture the annulus causing the nucleus to squeeze out, irritating a nerve and causing pain.

Decompression: A surgical procedure which relieves pressure on the spinal cord or nerve roots. The pressure may result from fracture fragments, disc fragments, tumors, or infections.

Discectomy: Removal of all or a portion of the intervertebral disc.

Laminectomy: Removal of the lamina. This procedure allows the surgeon to approach the spinal cord and nerves for removal of tumors and herniated discs.

Laminotomy: Removal of only a portion of the lamina - the back part of a spinal bone - to relieve the pressure in a specific spot.

Scoliosis: Abnormal lateral curvature of the vertebral column, depending on etiology, there may be one curve or a primary, secondary compensatory curve.

Spinal stenosis: Narrowing of the vertebral canal, nerve root canals or intervertebral foramina, causing irritation of the nearby nerves, congenital or due to spinal degeneration.

Spondylolisthesis (a slippage): A displacement of one spinal vertebrae compared to another.



HOSPITAL

Pre-hospital Introduction

Preparing for Spine Surgery Checklist

This checklist will assist you in completing your pre-hospital preparations. Your physician will decide which diagnostic appointments and test he/she would like you to have. Along with when to STOP certain medications, eating and drinking.

- Register for Online Class and view resources to help prepare for surgery at ***hoagorthopedicinstitute.com/spine***.
- Make arrangements for caregiver availability for support and help for surgery and recovery.
- Name of caregiver _____
- Make my appointment(s) with other physicians as requested.
- Start my pre-surgical exercise program, page 46.
- Start my pre-surgical nutritional guidelines, page 70.
- I will discuss reducing opioids prior to surgery with my surgeon.
- Stop smoking cigarettes and nicotine products six weeks prior to my surgery.
- Complete my Pre-admission Screening 2-4 weeks prior to or upon scheduling my surgery.
- Complete an Advance Health Care Directive, if needed, two weeks prior to my surgery.
- My doctor has advised me to STOP taking blood thinners: _____
Date to stop: _____
- My doctor has advised me to STOP taking anti-inflammatory medications: _____
Date to stop: _____
- I will follow the directions for the bowel regimen my surgeon has given me.
- Shower with chlorhexidine gluconate soap and nasal decolonization as instructed.
First day of shower _____
First day of nasal swabs and time _____
- Brush my teeth/oral care before coming to the hospital/prior to surgery.
- Do NOT eat anything after (DATE) _____ at midnight prior to surgery.
- Do NOT drink anything after (DATE) _____ and (TIME) _____ prior to surgery.

I will bring the following items to the hospital:

- Toiletries
- Closed-toe/non-skid slippers or shoes
(If you use an orthotic, please bring it too)
- Additional loose-fitting clothing including socks, shoes and undergarments
- Orthotic brace
- Hearing aides
- Glasses with case
- CPAP mask and machine
- Cell phone and charger

Pre-Op Classes

You should attend Hoag Orthopedic Institute's online class in advance of your surgery date, or as soon as your surgery is scheduled. The class is held regularly for your convenience. A list of class dates will be provided by your surgeon's office or may be viewed at HOlexperts.com/spine. You can also register for the online class or watch the Spine Orientation Video and view educational handouts at this link.

Preliminary Tests

Before your surgery, you will need to have preliminary tests such as blood tests, possibly an electrocardiogram (EKG), chest X-ray, urine analysis and nasal swab. It is important that these tests be completed prior to surgery and as soon as possible.

Pre-admission Screening

The pre-admission staff (PAS) at Hoag Orthopedic Institute will call you within days of being scheduled for surgery. During this call, they will confirm your personal information is correct, confirm your dates for pre-admission testing and any medical clearance your physician may require you to have prior to your surgery. The staff at the pre-admission department will assist you in planning appropriate dates for these appointments. You may call them at 949-727-5010, option 3.

Prior to the completion of your PAS phone call, a call time will be assigned for you to speak with a nurse navigator about one week prior to your surgery. Be prepared to review your medication list and medical history with your nurse navigator. Medical clearances are very important to complete if you have been asked to have one. They help the physicians determine your needs for care and if not completed in time, it can result in a cancellation of surgery. Booking an appointment with your primary care physician or specialist as early as possible is vital, as they may be difficult to see you with short notice.

Preparation for Surgery

Review Insurance and Financial Planning

Thoroughly review your insurance benefits and/or alternative plans for payment.

If you have any questions about your health insurance benefits, **please call your insurance plan's customer relations department.** The number is usually toll free and may be found on the back of your insurance card.

A member of the Registration team will call to confirm your insurance, address, and phone number. They will notify you if there is any financial responsibility. Full estimated payment is required prior to admission or on day of service.

Please bring your insurance card, photo identification, and form of payment on the day of your surgery.

Universal Decolonization

Universal Decolonization is a strategy used to help prevent health care-associated infections, particularly those caused by methicillin-resistant *Staphylococcus aureus* (MRSA) and methicillin sensitive *Staphylococcus aureus* (MSSA).

The goal of decolonization is to lower the microbial bio-burden on body sites to reduce the risk of infection. Nasal decolonization through the application of a topical antibiotic or antiseptic agent and skin decolonization through the application of an antiseptic during bathing are common methods and frequently are used together.

Your surgeon's office will provide products and instructions on how to perform the decolonization process. If you have any questions or are unable to tolerate or perform the process, please notify the surgeon's office.

Risks and Possible Complications of Spine Surgery

The following is a list of potential complications and risks associated with major surgeries such as your spine surgery. Your physician will explain risks that are pertinent to your specific surgery.

- Complications from anesthesia
- Infection
- Injury to blood vessels
- Injury to nerves
- Blood clots
- Blood loss
- Transfusion reactions
- Death

There may be potential risks that apply to you as an individual that are not listed. If you have any questions or concerns about these or other complications of surgery, please discuss them with your physician.

Pain Management Patient Information

Some pain is expected with any surgery but our goal is to assist you in minimizing your pain within your established goals.

Safe and Effective Pain Control

Safe pain control is the use of medication and other therapies to control pain with the least amount of side effects. Your surgical team will work with you to:

- Screen for current opioid use and risk for overuse
- Use alternatives to opioids whenever possible
- Educate you about using the lowest dose of opioids for the shortest amount of time and safely getting rid of any unused opioids

How does pain affect my recovery?

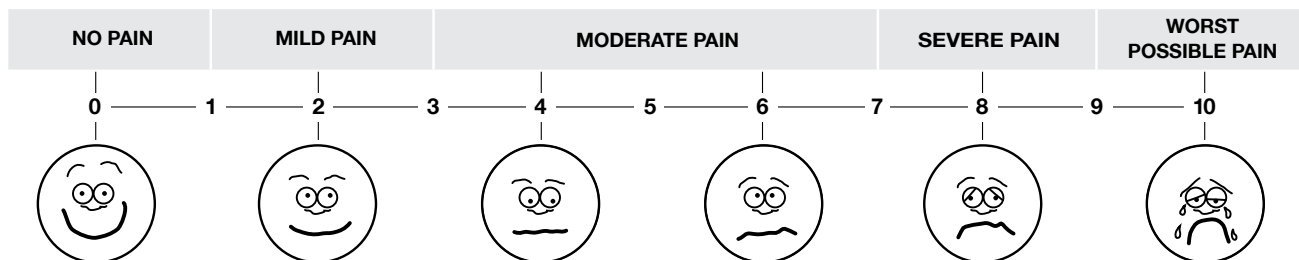
Unrelieved pain can delay your recovery process. Our goal is to provide balanced pain control so that you can participate in activities that help return you to your best level of functioning, for example, keep you moving and ambulating.

What should I tell my doctor and nurse about my pain?

Any time you experience pain, inform your physician or registered nurse (RN) even if they don't ask you. They may ask you to describe how bad your pain is on a scale of 0 (zero) to 10 with 0 being no pain and 10 being the most severe pain you have ever had. They may use a scale, faces or descriptors when asking.

Why is it important to be asked about my pain level so frequently?

Expect to progress in your activity level. Your pain may change over time. Also following different activities, tests or procedures, your pain medication may not be working effectively. It is important to report what makes your pain better or worse. The RN and physician will also be monitoring any untoward side effects of the pain medication to make sure you do not get overly sedated.



How can my pain be controlled?

Pain relief options are numerous and include a combination of therapies and medications such as non-opioids, anti-spasmodics, anti-inflammatories, or opioids. Commonly administered opioids are oxycodone or hydrocodone-acetaminophen or Norco™. There are also pain control methods that don't involve medicine, such as distraction, relaxation, repositioning, cold packs or massage.

What if my pain is still not controlled?

Some amount of pain or discomfort is expected after surgery. The RNs and physicians need your help to evaluate how the medicine is working. Inform them if you have pain that is not relieved and/or in any location other than what you expected. There may be another modality or medication that may work better for you.

How can I safely use opioids to manage my pain?

Take the lowest dose possible for the shortest amount of time. For surgical patients with severe pain, addiction is rare when opioids are used for 5 days or less, but is still a risk for many in the United States today. **The soonest you can wean off opioids to non-opioids is the safest way to manage your pain.**

Never take more medication than prescribed. Do not crush pills, which can speed the rate your body absorbs the opioid and cause an overdose.

What if I have allergies to medications, foods or substances?

Tell the RN what your allergies are, and what type of reaction you have experienced in the past. Make sure it is written on your allergy armband.

What if I have chronic pain?

Let your RN and physician know what type of ongoing chronic pain you have been experiencing, and what medications or treatments have been effective for you. A pain management specialist may be added to your team to oversee your pain plan.

What are the side effects of opioids?

Common side effects of opioid medication can include: nausea, itchiness, constipation, difficulty urinating, and sedation. If you are bothered by any of these side effects tell the RN and/or physician. The staff will be checking your breathing and sedation level on a regular basis. It may be necessary to wake you in order to safely evaluate your breathing. If you develop any unusual feelings while receiving medication, notify the RN immediately.

How do I store or get rid of my leftover opioids?

For the safe storage of opioids:

- Keep out of reach of children or pets
- Hide or lock up medications
- Keep your medication in its original container so you do not take it by mistake
- Keep track of the location and number of pills in the bottle

Dispose of opioids as soon as they are no longer needed at a drug take-back program or safe drop site. Find more information at <http://usdoj.gov> or search for DEA National Prescription Drug Take Back Day near you.



HOI HOSPITAL

Pre-hospital Preparedness

Pre-hospital Introduction

Two – Four Weeks Prior to Surgery

- Attend a pre-op class or if unable, view online resources to prepare for surgery
- Complete necessary medical exam per your surgeon
- Refer to pre-surgical nutrition guidelines
- Exercise
- Complete dental work
- Review and understand decolonization kit for use prior to surgery

Five Days Prior to Surgery

HOI would like to assist you with the fight against infection, which starts at home. You will receive nasal swab and antiseptic wash bathing instructions from your surgeon's office at the pre-op appointment. Please follow these instructions to prevent infection.

Visit hoagorthopedicinstitute.com/spine for detailed instructions.

What is a Surgical Site Infection (SSI)?

A surgical site infection (SSI) can occur after surgery either directly at the site of the incision or in the region of the body where the surgery took place. Microorganisms from your own body or from the environment can enter the body through the incision made by the surgeon during or after the operation. Most patients who have surgery do not develop an infection.

Some of the common symptoms of a surgical site infection are:

- Fever
- Redness and pain around the area where you had surgery
- Increased swelling that goes past the wound area and does not go away after five days
- Drainage of cloudy fluid from your surgical wound (It is normal to have a small amount of draining from the wound for the first day or two after surgery.)

Can SSIs be treated?

Most surgical site infections can be treated with antibiotics. The antibiotic prescribed depends on the bacteria causing the infection, since different antibiotics are active against different organisms. A patient's health care team will likely take samples from the infected wound to determine what antibiotic should be used. In some cases, the infection may require additional surgery, particularly if deeper tissue is affected by the infection.

What are some of the things that HOI is doing to prevent SSIs?

Our specialized team follows strict guidelines and have developed a comprehensive plan to minimize your risk of infection.

- Do NOT shave the operative area prior to surgery. If necessary, hair removal prep will be done by trained staff at the hospital.
- In most cases, patients are given antibiotics before surgery starts.
- Clean the skin with an antiseptic soap to help reduce surgical site infections.

What can I do to help prevent an infection?

Before your surgery

- Tell your surgeon about all of your medical problems.
- Report any skin irritation or issue to your surgeon and nurse navigator before coming to the hospital.
- If you smoke, quit. For help, go to Kick It California <https://kickitca.org/>
- If possible, existing infections should be treated prior to undergoing surgery.
- Do not shave near where you will have surgery.

After your surgery

- Keep incision dressing clean, dry and intact as instructed.
- Continue post-hospital instructions for decolonization as instructed.
- Wash hands regularly especially before touching dressing or incision area.
- Bathe or shower as instructed.
- Keep away from people that are ill or sick as long as possible.
- Keep pets away from your incision.

Important precautions:

- Health care providers will clean their hands before and after examining you, with either soap and water or an alcohol-based hand sanitizer.
- Family and friends should clean their hands with soap and water or an alcohol-based hand sanitizer before and after visiting you.
- Family and friends should not touch the surgical wound or dressings.



What do I need to do when I go home from the hospital?

- Follow the instructions given to you on the care of your wound.
- Clean your hands before and after caring for your wound.
- Frequently wash your hands with soap and water by scrubbing them briskly for at least 15 seconds.
- If you have any symptoms of an infection, such as redness and pain at the surgery site, drainage or fever, call your doctor immediately.
- Never allow your pet near a fresh surgical site or lick the wound.

48 Hours Prior to Surgery Basic Guidelines Include:

- No alcohol or smoking prior to surgery
- Notify your surgeon if you think you may have an infection (tooth/bladder) or do not feel well
- Continue to follow pre-surgical nutrition guidelines
- Arrange for transportation to and from the hospital
- Continue decolonization kit instructions

24 Hours Prior to Surgery Basic Guidelines Include:

- Continue to follow pre-surgical nutrition guidelines
- Refer to pre-admission checklist

The Evening Before Surgery

The evening before your surgery, your anesthesiologist may call you to discuss your medical-surgical history. You may wish to prepare a list of questions or concerns. You may wish to prepare a list of questions or concerns. Be prepared to discuss your daily medication routine.

Your surgeon may have given you specific instructions in preparation for your surgery. It is important to follow them closely. Here are some general instructions that should be followed:

- Do not eat or drink anything after MIDNIGHT unless instructed otherwise by your surgeon
- Use Antiseptic Wash (Chlorexidine) as directed
- Clean pajamas
- Clean bed linens
- No sleeping with pets

Admission

- Do not take any medications the day of surgery unless directed to do so by your physician.
- If your surgeon or anesthesiologist has instructed you to take your routine medications, please take them with a small sip of water.
- Only bring medications instructed to you by your patient navigator in an original pharmacy bottle.
- Leave money, valuables and jewelry at home.
- Bring your dentures, hearing aids and/or eye glasses, but note they will likely be removed prior to surgery.

For Your Hospital Stay

Consider bringing the following items:

- Non-skid, closed-heel slippers or shoes
- Cell phone and charger
- Comfortable and loose clothing for admission and discharge
- MD issued brace or corset
- Hearing aides
- Glasses with case
- CPAP mask and machine



Some Common Medications to Avoid Before Surgery Unless Prescribed by Your Physician

Aspirin Medications

Bufferin[®], Ascriptin[®], Ecotrin[®], codeine with aspirin, Fiorinal[®], Percodan[®]

Anti-inflammatory Medications

Motrin[®], Nuprin[®], Advil[®], ibuprofen, Indomethacin, Orudis[®], Aleve[®], Meloxicam[®], any non-steroid anti-inflammatory medications. Check with your physician regarding prescription medications.

Anti-clotting Medications

Eliquis, Xarelto, Coumadin[®], heparin, Persantine[®], Plavix[®], aspirin (for medical treatment) or hormone replacements. Check with your prescribing physician regarding cessation and resumption of blood thinners.

Herbal and Dietary Supplements

Some herbal and dietary supplements may interact with your post-operative medication and may have the potential to thin your blood or affect wound healing. Therefore, even if you're taking them without problems, some supplements can increase the risk of surgery.

STOP herbal supplements, nutraceuticals and other non-prescription substances at least two weeks before surgery because serious interactions with anesthetic agents and other medications can occur. Examples include: Ephedra, garlic, ginkgo biloba, ginseng, Kava, St. John's Wort, Valerian, Vitamin E, Fish Oil, and many others.

Examples of Medications that Can be Taken

Examples of medications that can be taken include: Tramadol[®], Tylenol[®], Vicodin[®], Percocet[®], Norco[®], Oxycodone[®]. If you have specific questions regarding these medications, speak with your physician.

Your physician will discuss what medications you may take.

For nutrition recommendations to help your recovery, please see the Appendix for **Fuel Your Recovery with Nutrition.**



HOL HOSPITAL

Surgery

The Day of Surgery



Pre-operative Admission Area

- It is important that you arrive at the requested time.
- You will meet with a staff member who will escort you to pre-operative area.
- Your family will wait in the surgical waiting area until you have completed the necessary pre-op steps before surgery.
- Once you are prepared for surgery, a family member may join you until you are taken to the operating room.
- Registration will verify your support person's contact information so your surgeon may call on completion of your surgery.
- Please leave your belongings and valuables with a family member or friend while you're in surgery and have them bring them to your room once you're in the nursing unit.

Registration Check- In

On the day of surgery, you will check in with Registration.

Your physician will contact the designated family member via phone to discuss the surgery and the patient's condition.

Visitor Policy Update

Please visit our website hoagorthopedicinstitute.com/visitors for current information about visitors during the hospital process.

Pre-operative Area

- Preparations for your surgery are completed in the pre-op room.
- Your anesthesiologist and or nurse will meet you here to review your chart, complete the physical examination and discuss any concerns or questions you might have regarding anesthesia.
- An intravenous line will be started and you may receive some sedation.
- You will then be transferred to the Operating Room by a nurse.

Operating Room

When you arrive in the Operating Room you will be given an anesthetic. You will be positioned on a bed that is specially designed for spine surgery, your surgical site will be scrubbed and the surgery will begin. After surgery you will be transferred by bed to the Post Anesthesia Care Unit (PACU).

Post Anesthesia Care Unit (PACU)

After surgery, you will be closely monitored until you are recovered from anesthesia in PACU. You may shiver or feel cool when you first wake up from surgery, this is very normal. You will be medicated for the shivering and warm blankets will be provided. You will be given pain medication as needed. When you are ready to leave the PACU, you will be transferred to the nursing unit in a bed by a hospital staff member or discharged home or to an extended care facility.



HOLL HOSPITAL

Hospital Stay

After Your Surgery

When you arrive on the nursing unit, a nurse will take your vital signs (blood pressure, pulse and respirations). These will be monitored until you are discharged from the hospital. Your nurse will check your extremities for numbness or tingling. The circulation in your extremities will also be monitored and you will be instructed to exercise your ankles and feet 10 times every hour while awake. These exercises are very important to help increase circulation and reduce the risk of blood clot formation in your legs. Your physician may also recommend “pump-activated” stockings to help improve your circulation. During your stay, the nurse will also check your surgical dressing and drain, if you have one. You will receive instructions for dressing changes. If you have an incisional drain, it will be connected to a reservoir and will be checked frequently.

Breathing Exercises

It is very important to exercise your lungs and you will be asked to perform deep-breathing exercises every hour in the immediate post-operative period. Deep-breathing exercises help to expand your lungs fully and prevent pneumonia and high fevers. You may be given a tool known as an incentive spirometer to help you expand your lungs and take deeper breaths. The spirometer will be placed at your bedside table and a nurse will instruct you in the proper use of this device. We encourage you to use this ten times an hour as instructed while awake.

Swallowing for Cervical Spine Patients

After your surgery, you may have swelling in the incisional area making it difficult and/or painful to swallow. Your nurse will assess your swallowing before starting your diet. You may be more comfortable in an upright position. Your nurse can help you to elevate the head of bed. Depending on the severity, a swallowing evaluation by a speech therapist may be ordered by the physician.

Pain Management

It is expected to have incisional pain and discomfort after surgery. Cervical spine patients may have pain to the back of neck and shoulders. Lumbar patients may have pain to lower back and legs. Your comfort level will be monitored by your nurse. Do not wait too long to request pain medication as it may take longer to relieve your pain. Please let your nurse know if you are not receiving adequate relief.

While in the hospital, you will be asked to describe your level of pain based on a scale of 0-10 (shown below).

Diet Immediately After Surgery

Your nurse and care team will assess your individual needs after surgery. Your diet will be advanced as tolerated. You may be offered gum post-surgery to promote gut motility.

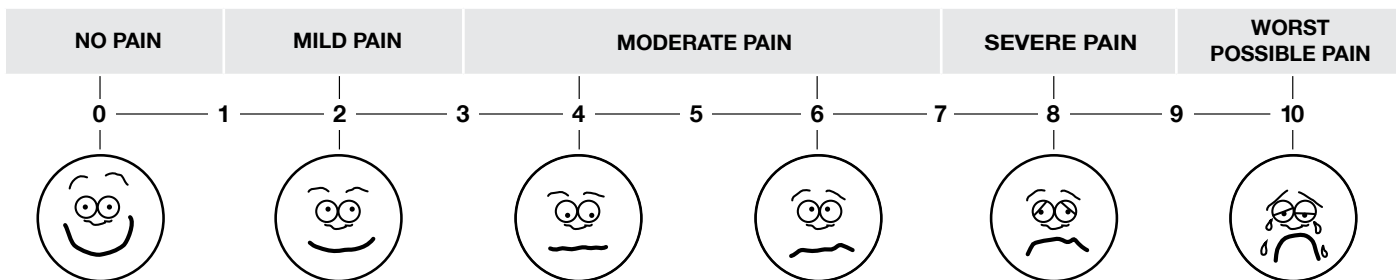
Common Issues After Surgery

Constipation

Constipation is common after surgery due to many reasons including the use of opioids, decreased activity, changes in diet, electrolyte imbalances and general anesthesia. Constipation treatments should include drinking plenty of water and adding appropriate fiber to your diet. Increasing your activity to your tolerance is a way to get your bowels moving after surgery. Follow the bowel regimen prescribed to you by your surgeon. Opioids can cause constipation so it is important to follow your bowel regimen guidelines.

Nausea

Nausea is a common side effect of surgery. Your diet can be modified as your nausea subsides to include more foods that you enjoy.





HOI HOSPITAL

Hospital Stay Cervical Spine

Daily Activities Guidelines: Cervical Spine Surgery

To help keep you informed about what to expect as you recover from your surgery, we recommend that you refer to the following daily patient activity guidelines.

During Your Hospital Stay:

1. Medical Assessments

Your nurse will assess vital signs, sensation, circulation, movement of extremities, lung sounds, bowel sounds, any dressings or incisions, as well as pain. A bedside swallow screen will be performed in order to advance your diet.

2. Medications

Transition from IV to oral pain medications and resume routine home medications.

You may continue to have pre-op symptoms as the nerve may be irritated from surgery. Numbness and tingling take time to resolve.

Common complaints: pain to shoulders, back of neck, sore throat and easily fatigued.

3. Activity

Our specialized staff will assess your abilities. Staff will then help the patient to the edge of the bed, ambulate to the bathroom, transfer to a commode, as ordered by the physician. Neck brace will be ordered by the physician as appropriate for further activity. A physical therapy evaluation will be initiated. Therapy sessions may include transfer training, gait training, instruction in putting on/taking off brace (if ordered by physician), as well as education on car transfers, stair training, spine precautions, and progression for activities in the home.

Progressive activity will be encouraged to increase overall activity level. The nursing staff will instruct the patient in hourly ankle pumps to help with circulation.

Braces: There are two types of braces. Your surgeon may order you a soft collar or a rigid brace.

4. Diet

Diet will start on passing of swallow screen. Your diet will be advanced as tolerated. Sit upright for meals. You may experience a sore throat.

You may need to remain on soft and moist foods until sore throat improves and you may slowly advance diet as tolerated.

5. Education

Review cervical precautions, proper body mechanics and activity limitations. Review incision care, use of your brace and comfort measures. You may remove brace to shower. Elevate the head of your bed for comfort.

Discharge education will include: activity orders, incision care, home medications, new prescriptions, and pain management.

Guidelines For Good Body Mechanics: Cervical Spine Surgery

- Avoid excessive motion (flexion extension turning) at the neck by keeping head and shoulders aligned. Pivot on your feet and turn your whole body instead.
- Avoid reaching for objects by moving closer to the object.
- Avoid reaching overhead for objects; ask for assistance (normal hygiene activity is allowed).
- Avoid lifting objects weighing over 1-3 pounds using a cup of coffee or soda can as reference.
- Avoid slouching by keeping your three natural curves (cervical, thoracic, and lumbar) aligned with your head and shoulders over your hips and knees. This includes standing and sitting positions.
- Avoid any excessive neck motion which includes nodding “yes” or “no” when speaking.
- When lying down, avoid excessive pillows under the head which might push your head forward.
- When eating, loosen rigid braces one notch to allow for chewing. Be mindful of your movement as you will have less support during this time.
- May remove brace to shower.
- Keep reading materials at eye level. You may need pillows to support arms.
- Watch for any items left in your path or small animals. In your hard collar, you have no visual field to your feet.

If coughing with water, thin liquids, or if unable to tolerate liquids, notify your surgeon immediately.



Hospital Stay Lumbar Spine

Daily Activities Guidelines Following a Lumbar or Thoracic Spine Surgery

To help keep you informed about what to expect as you recover from your surgery, we recommend that you refer to the following daily patient activity guidelines.

During Your Hospital Stay:

1. Assessments

Your nurse will assess vital signs, sensation, circulation, movement of extremities, lung sounds, bowel sounds, any dressings or incisions, as well as pain. Assessment for removal of Foley catheter if applicable.

2. Medications

Oral or IV pain medications as appropriate for pain management. Muscle relaxers for spasms if needed. Resume home medications.

3. Activity

Our specialized staff will assess your mobility and initiate your activity accordingly. Progression of ambulation will be determined by the patient's tolerance to the activity. The therapist will review log rolling, proper body mechanics, putting on/taking off lumbar brace (if ordered by physician), positioning in bed, and post surgical exercises with the patient. The nursing staff will instruct the patient in hourly ankle pumps to help with circulation, side lying position for comfort, and mobility and exercises in conjunction with physical therapy.

4. Diet

Your diet will be advanced as tolerated. You will be offered gum post-surgery to promote gut motility.

5. Education

Review the use of incentive spirometer, spine precautions, proper body mechanics, activity limitations, and spine pathway exercises. Review incision care. Discuss equipment needs (i.e. brace, walker or commode).

Discharge education will include: activity orders, incision care, home medications, new prescriptions, and pain management.

Guidelines For Good Body Mechanics: Lumbar Spine

- Avoid bending the trunk by keeping the back straight, hinge at the hips, and squat at the knees.
- Avoid lifting and/or reaching by moving close to the object and use a step stool to keep objects at eye level.
- Avoid twisting by keeping shoulders, hips and knees facing the same direction.
- Avoid or modify tasks which commonly involve a combination of bending, lifting, twisting, reaching, pushing, and pulling. These include tasks such as vacuuming, laundry and food preparations.
- Avoid prolonged positioning by changing position frequently before fatigue or pain sets in. Do not sit for long periods of time. Short, frequent walks throughout the day may help. Physician will advise you further on first follow-up appointment.
- Wear your brace as instructed.
- Avoid slouching and maintain the normal three curves of your spine (cervical, thoracic, and lumbar) by keeping your head and shoulders over your hips and knees. This is true for sitting and standing positions.
- When lying down on your back, use pillows under the knees and under the head and neck. Avoid pillows under the shoulders. When lying on your side, use pillows between knees and under your neck to maintain a midline posture. Log roll to get in and out of bed.
- Avoid lifting any object weighing over 5-10 pounds using a gallon of milk as reference. Such objects also include groceries, trash, small pets, small children, laundry, household furniture, vacuum cleaner, etc.

Your pre-op symptoms will continue to improve – not always measurable on a daily basis but as your recovery progresses.

- May experience intermittent pre-op symptoms as the nerve can be inflamed.
- Numbness and tingling take longer to resolve.



HOI HOSPITAL

Pre-Op and Post-Op Exercises

Pre-Op and Post-Op Exercise for Spine Patients

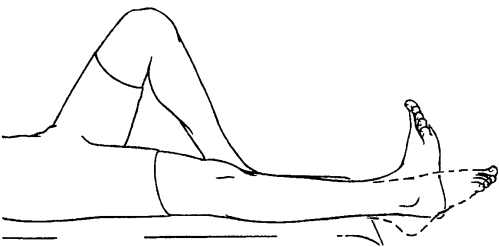
Gentle exercises help stretch and strengthen your trunk and leg muscles. By exercising pre-operatively you can begin to train your muscles for the exercises and movements you will be doing post-operatively. You will do some of these exercises after surgery with the help of your physical therapist.

Before performing the exercises, use proper body mechanics as you position yourself on a firm surface or bed. Avoid twisting or bending your back. Think of your body as a log from your shoulders to your hips. Keep your ears, shoulder and hips in alignment.

Start performing these exercises today and continue until the day of your surgery. Do them twice each day while lying on a firm, flat surface such as the bed or couch. Do them slowly and gently without increasing your pain. Remember to continue breathing while exercising.

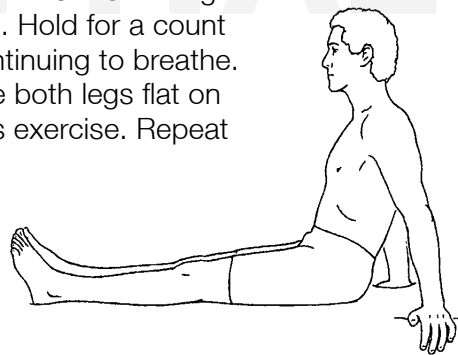
1 ANKLE PUMPS

Move ankles up and down and around in circles. Repeat a minimum of 10 times.



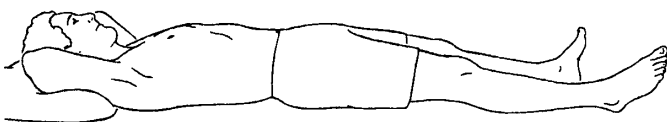
2 QUAD SETS

Slowly tighten muscles on thigh of straight leg. Hold for a count of 5 while continuing to breathe. You may have both legs flat on bed to do this exercise. Repeat 10 times.



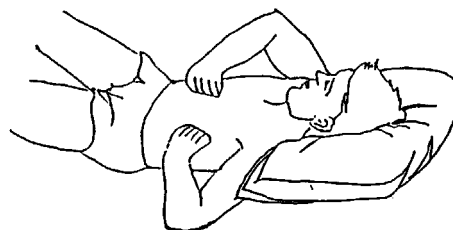
3 GLUTEAL SETS

Pinch your buttocks together and hold contraction for a count of 5 while continuing to breathe. Repeat 10 times.



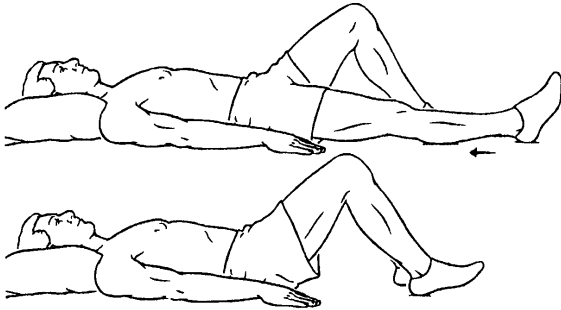
4 ISOMETRIC ABDOMINAL SETS

Lying on your back with your knees bent, place your fingertips on your lower abdominals. Tighten your abdominals as if you were pulling on a tight pair of pants. Hold for a count of 5 while continuing to breathe. Repeat 10 times.



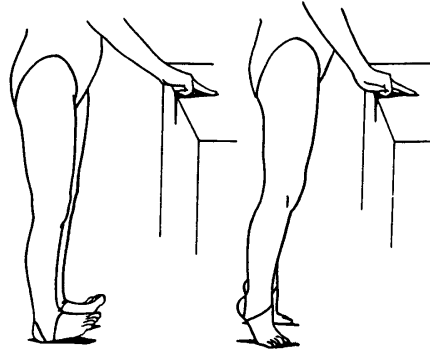
5 HEEL SLIDES

Contract lower abdominals, bend knee and pull heel toward buttocks. Straighten knee, relax abdominals and repeat with other knee. Repeat 10 times, 3 times per day.



6 HEEL RAISES AND TOE RAISES

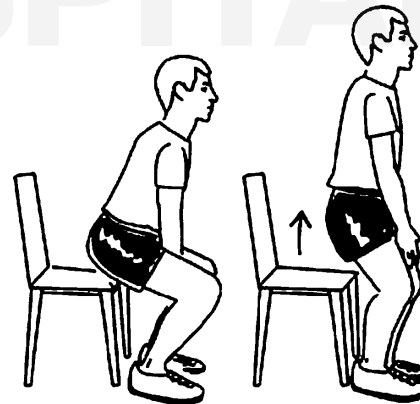
Stand erect without leaning forward. Your hand may touch something for balance only. Tighten abdominals and buttocks. Rise on balls of feet with knees straight. Return to starting position. Now raise toes up toward ceiling without moving trunk.



7 SIT TO STAND

While sitting at the edge of bed or chair, scoot buttocks to the edge of the sitting surface. Slide feet back to place underneath your buttocks. Lean trunk forward while bending at your hips (not back). Push with at least one or both hands on the sitting surface while pushing with your legs to attain standing.

To sit down, back up to the sitting surface until you feel the bed or chair against legs. Sit hips back towards the sitting surface while reaching with one or both hands. One hand may remain on assisted device such as a walker or cane, while sitting down. Slowly lower self down onto sitting surface until you feel your buttocks securely on bed or chair.

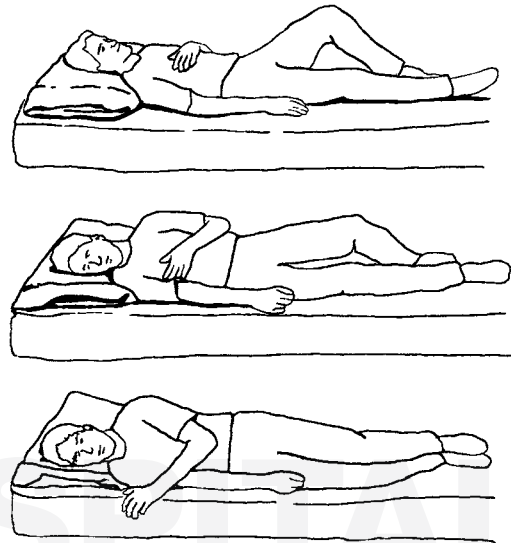


Physical Therapy Activities

The following techniques will enable you to move safely, and get in and out of bed while protecting your neck and back.

1 ROLLING SIDE TO SIDE

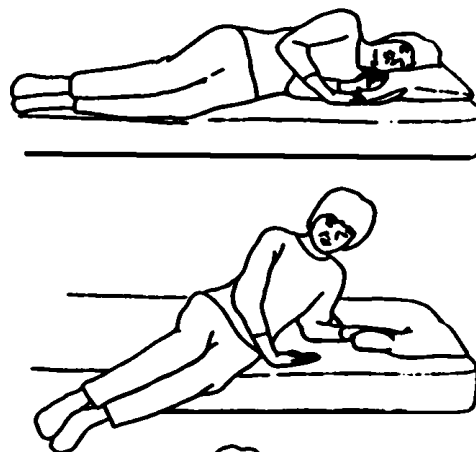
Lying on your back, begin by bracing your abdominals. Bend both your knees up, keeping feet on the bed. Initiate the roll to one side, keeping shoulders, hips and knees in line, to avoid twisting in the low back and keeping head and shoulders in line to avoid movement in the neck.



2 GETTING IN AND OUT OF BED

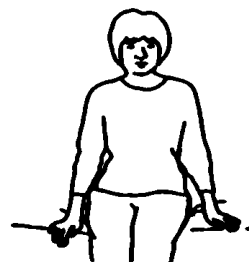
To sit at the side of the bed, log roll to your side as above, brace your abdominals, lower your legs off the bed at the same time as you push with elbow underneath you and other hand in front of body to attain upright position. Maintain your shoulders, hips and knees in alignment. Maintain your head and shoulders in alignment.

To return to bed: reverse the above.



3 SIT TO SIDE LYING

Place hand that is closest to the head of bed towards corner of bed. Lower self down onto elbow then shoulder while bringing legs up to lie self directly onto side. Now log roll self so back is completely flat on bed. Remember to keep shoulders, knees and hips moving together to maintain neutral (straight) spine.

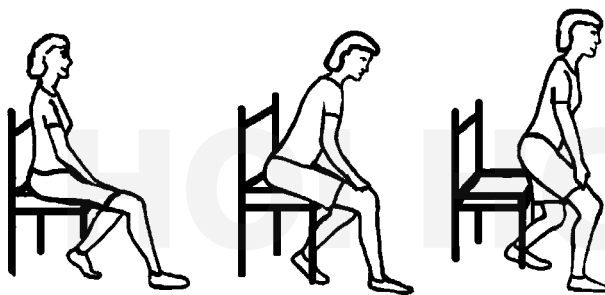


4a TO STAND

Scoot to edge of the chair. Place one foot forward and the other foot back. Your front leg is the weight bearing leg and the back leg is the propelling leg. Hinge forward from hips so that your weight shifts onto your front foot and your nose moves over your knees. Stand up by pushing feet into the floor. One or both hands on chair to push to stand or sit back down to maintain contact with sit to stand transition.

4b TO SIT

Shift weight back, hinge at hips and sit gently on edge of the chair, then scoot back.

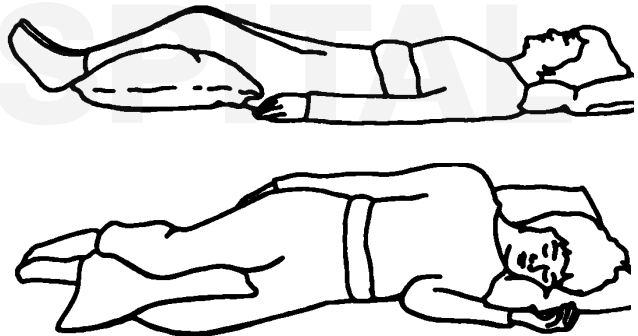


5 POSITIONING IN BED

Lying down decreases the pressure on your spine but it is important to maintain proper alignment when you are either on your back or on your side. No lying on your stomach. Choose a firm, supportive surface to lie on and soft pillows for support.

Lying on your back: Place a pillow under your neck and head for support, avoiding excessive forward head motion. Place a pillow under your knees and thighs.

Lying on your side: Place a pillow under your neck and head to support it in midline, keep head, shoulders and hips in alignment. Place a pillow between your knees with the knees slightly bent. A pillow held in front of your chest to support your arm may prevent your shoulder rolling forward and improve your comfort.



6 WALKING PROGRAM

After your surgery, your therapist will teach you to walk safely and properly. The best exercise for you after surgery is walking. It helps avoid blood clots and improve your endurance. You will be instructed on stair training as appropriate.

It is important to continue your walking program after your discharge from the hospital. It is best to take several short walks rather than one long fatiguing walk. Try to walk on level surfaces and at a moderate pace. It is recommended to walk with good closed shoes (e.g., tennis shoes).

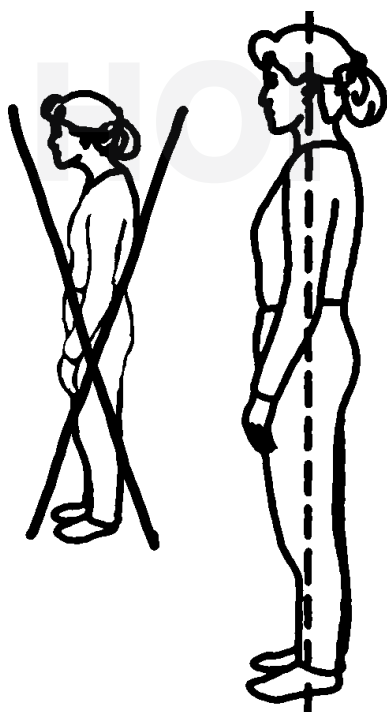
Activities of Daily Living

GOOD POSTURE IS IMPORTANT

Avoid slouching and forward head thrust; maintain curve in low back and align ears over shoulders, hip, knees over ankles.

KEEP SPINE IN NEUTRAL POSITION

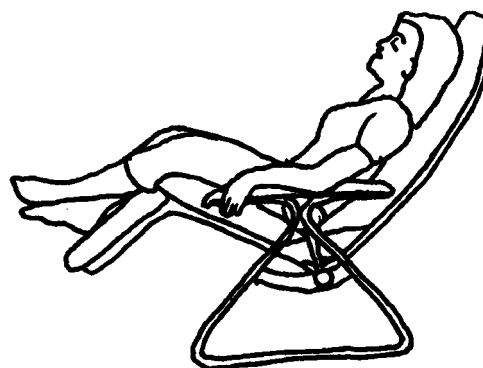
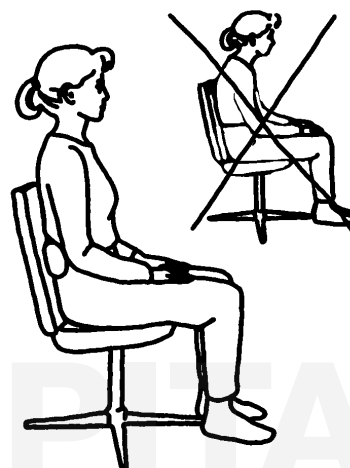
In this position your body is maintaining its three natural curves (cervical, thoracic, lumbar). A vertical line through your body should go through your ear, shoulder, pelvis and ankle. You should attempt to maintain your “stable spine” with all activities. This is done by bracing your stomach and back muscles with initiating all movements and activities.



SIT UPRIGHT, HEAD FACING FORWARD

Try using a rolled up towel to support your lower back. Keep shoulders relaxed, avoid rounded back. Keep hips level with knees. Avoid crossing legs for long periods.

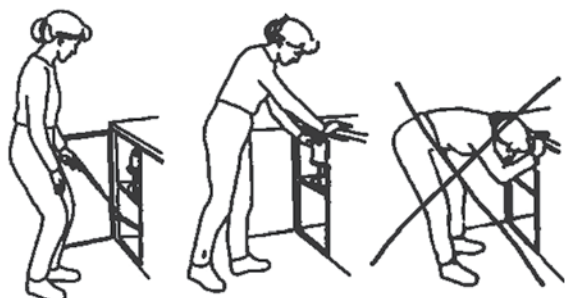
Sitting postures are used for resting, conversation and other activities.



You may recline with your back supported and feet elevated.

REACHING FOR HOUSEHOLD ITEMS

If you are unable to bend your knees or squat, use a Lazy Susan to keep items within easy reach. Store only light unbreakable items on the lowest shelves and use a reacher to pick items up. Keep commonly used items on easy-to-reach shelves.



Bend at hips and knees, not at the back. Keep feet shoulder width apart. Sit down onto heels. Keep entire back and neck straight. Maintain spine in neutral position.

GROOMING – APPLYING LOTION

Use long-handled lotion applicator or soft rubber spatula for hard to reach area such as legs or back.

DO NOT TWIST, BEND OR EXTEND TRUNK.



CAR TRANSFERS

Lower onto the seat, scoot back then bring one leg in at a time. Reverse to get out. Pivot on bottom to turn to get in/out of the car. DO NOT grab the door to get in/out of car.



GROOMING – SHAVING LEGS

Sit on a shower chair and cross your legs to reach.

Or, lie on supportive surface, large towel over area. Bring leg toward chest, keeping other leg in position as shown. Do not arch back.



GROOMING – BRUSHING TEETH/SHAVING

Place one foot on ledge and knee on counter. Bend other knee slightly to keep back straight. Brace self with opposite arm while grooming self with other hand.



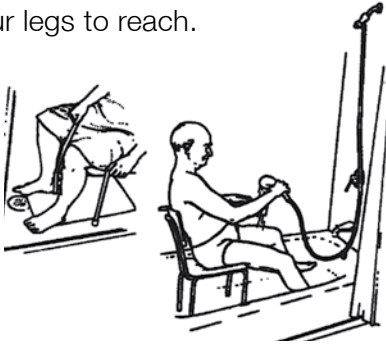
BATHING – LEGS AND FEET

Use a long-handled sponge or brush for soaping, rinse off with hand-held shower.

Use a reacher with a towel to dry feet and lower legs.

Make sure that tub or shower has a non-skid floor mat (e.g., Rubbermaid floor mat).

Or sit on a shower chair and cross your legs to reach.



Special precautions for lumbar spine patients.

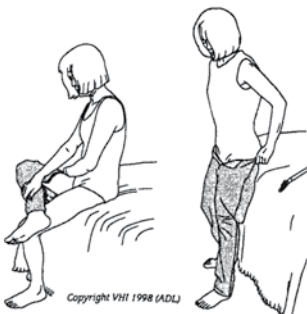
Leave back brace on until seated on the tub/shower chair.

Remove back brace and proceed with shower. DO NOT TWIST, FLEX OR EXTEND BACK.



DRESSING – LOWER BODY

Cross leg over opposite leg to bring foot on to lap to start clothing over foot. May use dressing aids to assist in pulling up. Keep back in neutral position-avoid arching back or bending.



SIDELYING IN BED

To maintain positioning in midline, place pillows between knees and under head.



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SLEEPING ON BACK

Place pillow under knees. A pillow with cervical support.

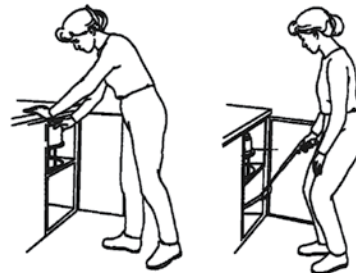


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HOME/WORK MANAGEMENT – REACHING DOWN

To adhere to your spine precautions, bend at your hips and knees. Use a Lazy Susan to keep items within easy reach.

Use a reacher to pick up light unbreakable items from low shelves.





HOSPITAL

Discharge
Home

Leaving the Hospital

Anticipate discharge once physical therapy has been completed. Patients are released upon physician order and after completion of nursing discharge education. Plan ahead and arrange transportation home before your admission.

Once your physician has released you from the hospital, you may begin preparing for discharge.

- If not already planned, arrange for transportation home
- Account for all personal belongings
- Confirm discharge time with your nurse
- Your nurse will review your discharge instructions
- The care manager should have equipment and home care arranged prior to discharge
- Your nurse will call for a transport person to assist you to your car

Patient Discharge Checklist

- I have my prescriptions.
- I understand what my medications are and how to use them safely.
- I understand when I should notify my doctor.
- I know when to see the doctor for a follow-up appointment.
- I know when I can shower.
- I know the arrangements for my home equipment and physical therapy.
- I know how to care for my incision.
- I know my home exercises and activities.
- I know my spine precautions.

After Leaving the Hospital

The following are general guidelines. They are helpful suggestions to make your recovery safe and comfortable.

Activity at Home

Your level of activity at home will vary according to your individual abilities and by the type of procedure performed. Follow the guidelines on activities and restrictions given to you by your physician.

Maintaining proper body mechanics and good posture can help minimize stress on your spine. Here are some tips for keeping your spine in good working order:

- The sooner you become active, the sooner you'll get back to normal. But you also need to protect your spine so it can heal. Plan frequent rest periods throughout the day. Remember, do not overdo your activities.
- Bending, lifting, twisting, stooping, pushing and pulling motions should be avoided to prevent pain and further injury to your spine.
- Think ahead before you act – consider movements and body mechanics involved.

For lumbar spine patients only:

- Sitting for long periods puts more pressure on your spine than lying or standing. When you sit, you should use a firm, upright chair.
- Do not lie on your stomach. Lie on your back or your side.
- Wearing a corset/brace when out of bed will give added support to your spine. Specific instructions will be discussed with you by your physician or physical therapist.
- Walking is the best exercise after spine surgery. The amount of time you spend walking should be gradually, but steadily increased each day, as tolerated.

For cervical patients:

- Limit activities which require overhead reaching – you may perform normal hygiene activities but should not lift objects over 5 pounds.
- Excessive neck movement should be avoided to prevent pain and further injury to your spine.
- Sit upright for meals.
- Continue soft and moist foods and advance towards regular texture foods as tolerated.
- Wear your brace as indicated.
- Create a “when can I list” to review with your surgeon at your post-op appointment to clarify your limitations moving forward.

Medication

You may take oral pain medication as needed and as prescribed by your physician. If you have any unusual symptoms such as nausea or upset stomach from the medication, promptly contact your physician's office. Pain medication taken with food may help prevent an upset stomach. DO NOT CONSUME ANY ALCOHOL WHEN TAKING PAIN MEDICATION. Follow a bowel regimen to prevent constipation while you are inactive and taking pain medication. You may resume taking other medications that you were taking prior to surgery when directed by your prescribing physician.

Incisional Care and Hygiene

Do not shower until you obtain permission and instructions from your surgeon.

Ask a family member to check your incision for signs of redness, swelling, drainage, increased tenderness or bleeding.

The incision was closed with either staples, sutures or surgical glue. They will be removed on your first return visit to your physician's office. Once they are removed, tape-like, steri-strips may be placed over the incision and you may not be required to cover the site with a dressing. The steri-strips should not be removed; they will fall off by themselves. After showering, gently pat the area dry with a towel not used on your body.

Sexual Activity

If you have questions or concerns about when to resume sexual activities, please ask your physician.

Follow-up Rehabilitation

Your physician may also recommend outpatient physical therapy after your initial post-operative visit. Pending your insurance coverage, Hoag Hospital Outpatient Physical Therapy or ProSport is an option.

When to Call Your Physician

- **Chest pain or shortness of breath, call 911**
- Temperature of 102° (Fahrenheit) or more
- Redness, swelling, drainage or an opening in your incision
- Change in sensation in your arms/legs
- Increased arm/leg or back pain
- Calf tenderness
- For cervical spine patients – increased hoarseness or problem with swallowing
- Changes in bowel or bladder function
- Rapid heart rate with feeling of dizziness
- If you have a significant problem and cannot reach your physician, have someone take you to the Hoag Hospital Emergency Care Unit

Follow-up appointment

- Call your physician's office for a return appointment
- Do not hesitate to call your physician if any problems or questions arise before your appointment

HOAG HOSPITAL

Outpatient Physical Therapy

Hoag Hospital Outpatient Physical Therapy

Irvine Location

16300 Sand Canyon Avenue, Suite 100
Irvine, CA 92618
Phone: 949-557-0630

Newport Beach Location

520 Superior Avenue, Suite 100
Newport Beach, CA 92663
Phone: 949-764-5645

ProSport Physical Therapy and Performance, official partner of Hoag Orthopedic Institute

Costa Mesa

2777 Bristol Street, Suite B
Costa Mesa, CA 92626
Phone: 949-250-1112

Foothill Ranch

26672 Portola Parkway, Suite 116
Foothill Ranch, CA 92610
Phone: 949-518-1220

Laguna Hills

23001 Del Lago Drive, Suite C-1
Laguna Hills, CA 92653
Phone: 949-387-7333

Mission Viejo

26932 Oso Parkway, Suite 260
Mission Viejo, CA 92691
Phone: 949-582-0132

Rancho Santa Margarita

30085 Comercio
Rancho Santa Margarita, CA 92688
Phone: 949-766-8535

Rancho Palos Verdes

28924 S. Western Avenue, Suite 101
Rancho Palos Verdes, CA 90275
Phone: 310-548-0104

San Juan Capistrano

32302 Camino Capistrano, Ste. 106
San Juan Capistrano, CA 92675
Phone: 949-276-8845

For more locations visit ProSportPT.com.

HOI HOSPITAL



Appendix

Fuel your Recovery with Nutrition

Proper nutrition is important for leading a healthy lifestyle, but it's a must before and after spine surgery. Getting prepared for surgery takes preparation. Consider pre-surgery nutrition planning similar to getting ready for a marathon. Surgery causes a stress reaction in the body that elevates the metabolism and increases your need for calories from proper foods.

Pre-Surgery Diet

Pre-Surgery diet should include as many nutrients from healthy food as possible before the surgery. Start now. Do not wait until few days before the surgery to focus on nutrition goals.

- **Eat enough protein.** At least 1-2 weeks before surgery, make sure to eat enough protein-rich foods every day. Protein provides building blocks for muscles, bones, and immune system. You want to be strong as possible going into surgery.
- **Stock up on fruit and vegetables.** Include a wide variety of colorful fruits and vegetables to most meals and snacks. Dark green leafy vegetables are great to repair muscles, bones, and cartilage because they contain loads of vitamins and minerals including vitamin C, K, and magnesium.
- **Include whole grains.** Healthy grains give the body B vitamins it needs to combat stress. Include foods such as barley, brown rice, buckwheat, bulgar, millet, oatmeal, popcorn, and whole wheat bread, pasta, or crackers.
- **Avoid crash dieting.** You need adequate nutrients for energy and recovery.
- **Cut back on junk food!** Avoid excessive added sugars, excessive salt, excessive caffeine, and alcohol from your diet as they can all slow bone healing and deplete your body of nutrients. They are considered empty calories and you want your calories to come from nutrient dense foods. Unless advised otherwise by your physician, try to get your nutrients from food rather than supplements because food helps the body absorb them better.
- **Plan ahead:**
 - Prepare food ahead of time and place in the freezer to be reheated later.
 - Make sure you have plenty of water, juice, milk or other types of healthy drinks available.
 - Stock up on healthy, low preparation foods such as fruit, nuts, cheese, pudding, yogurt, low-fat and low-sodium frozen dinners, and low-sodium canned foods.
 - Have a variety of take-out menus that offer healthy menu choices if you plan to have food delivered to your home.

Reach and maintain your desirable weight

Potential risks associated with obesity and spine surgery exists. Obesity or a Body Mass Index (BMI) greater than 40 has been linked to surgical complications such as:

- Increase risk of surgical site infections and non-healing wounds
- Medical complications such as post-operative pneumonia, heart attacks, strokes, peripheral swelling, blood clots and pulmonary embolism
- Lengthy recovery periods and poor progress in rehabilitation

Your physician may recommend weight loss before and after surgery and active lifestyle. Weight loss can be sustained over time through healthy diet, physical activity, and lifestyle behavior modifications.

Check with your doctor before starting a new weight management and exercise program. Aim for a weight-loss goal of 1-2 pounds per week until reaching your desired weight. Weight loss may be recommended to reduce your risk from the surgery. A goal of 5-10% weight loss in 6 months also has shown to improve reductions in triglycerides, blood glucose, and risk of developing Type 2 diabetes.

Post-Surgery Diet

Post-Surgery diet should include foods that can make it possible for a successful recovery and can help **You Get Back to You**.

Surgery increases the body's needs for calories, and nutrients which are needed for healing.

- **Eat balanced meals.** Focus on eating for strength and recovery.
- **Continue to eat enough protein.** Consume high quality protein foods at each meal to help support your muscles, aid in wound healing, and keeps your immune system strong. Protein is found in many food sources: meat, fish, eggs, poultry, nuts, dairy products, soy products, and cooked dried beans. If you have no appetite, try eating small amounts of low fat cheese or cottage cheese, yogurt, and plain baked chicken as these are usually well tolerated in the early days after surgery. Vegetarians can get high quality protein from soy-based foods and legumes.

- **Vitamin C and Zinc helps heal wounds.**

While all nutrients are important for healing, Vitamin C and Zinc are superstars.

Vitamin C is needed to make a protein called collagen and is needed to repair tendons, ligaments, and healing surgical wounds. Get Vitamin C from citrus fruits, green and red peppers, collard greens, broccoli, spinach, strawberries, tomatoes and baked potatoes.

Zinc is a mineral found mostly in animal foods like meat, fish, poultry, and dairy foods, as well as whole grain bread and cereals, dried beans and legumes, and nuts and seeds.

- **Include fiber and fluids.** Pain medications commonly prescribed after surgery can cause constipation. Whole grains, fruits, vegetables, legumes, nuts and seeds are some examples of fiber-rich foods. Prunes or prune juice (along with drinking plenty of water) have a natural laxative effect that can help alleviate constipation. Drink at least 6-8 cups of fluid per day; however you may need more or less depending on individual needs.
- **Eat enough iron-rich foods.** Because the body loses iron when bleeding, it's important to eat adequate amounts of lean red meat, poultry, fish, iron fortified cereals, legumes, dark leafy greens, and dried fruit. Iron is essential because it supplies oxygen to the muscle of the body. To enhanced iron absorption, iron rich foods should be eaten with Vitamin C rich foods.



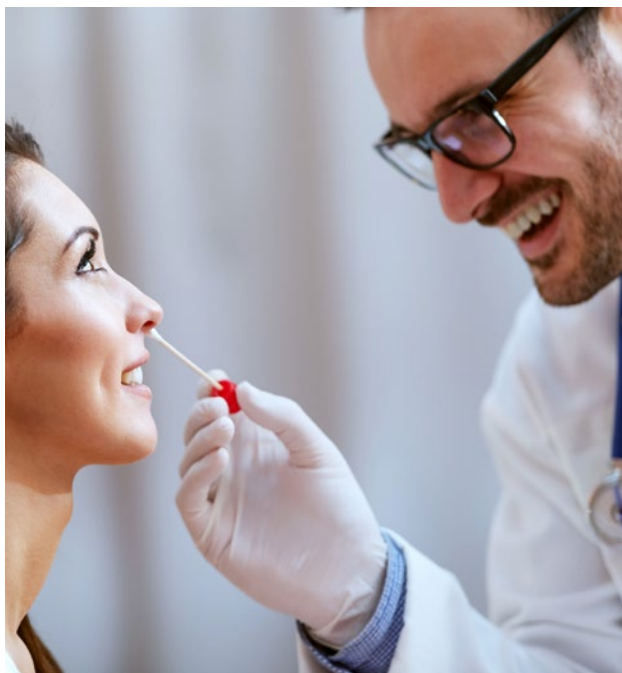
- **Calcium and Vitamin D.** Since your surgery involves the bone, be sure to get adequate amounts of Calcium and Vitamin D.

Calcium is an important component of bone. It is a mineral that is not made in the body and our bones continuously lose small amounts of it. Dairy foods like milk, cheese, and yogurt are often sources we think of first, but consider calcium-fortified juices, spinach and kale.

Vitamin D is an important vitamin for the bones. It ensures we can absorb calcium from the food we eat. Several food sources are: fortified orange juice, almond milk, and fatty fish. The sunlight is the best source.

- **Include nutrient-rich drinks/shakes.** You may lose your appetite after surgery and while taking certain medications. Oral nutritional supplements can help you get enough nutrients and calories.

MRSA Screening Patient Information



What will happen if the test is positive?

If your MRSA screening is positive, your doctor will prescribe an antibiotic nose ointment and use of a special body wash twice a day for 5 days. Once the 5 day treatment is completed, you will be asked to wait at least 2 days and then return to the lab for retesting. The retesting will include a swab of your nose, a swab of your axilla (underarm area), and a swab of your groin area. If the retesting is negative for MRSA you will not need any special precautions during your hospital stay.

If your MRSA screening is positive and your doctor proceeds with surgery, you will be placed in contact precautions to prevent the spread of MRSA. Contact precautions mean:

- Supplies needed to keep MRSA from spreading will be stored at the door of your room.
- A sign will be placed on the outside of your hospital door to alert staff and your visitors.
- Hospital staff wear protective gear, such as gloves and a gown when entering your room to provide care.
- All visitors should wear a gown and gloves while in your room; nursing staff will provide assistance if needed.
- When leaving the room, health care providers and visitors remove their gown and gloves and clean their hands.

What is Methicillin-resistant Staphylococcus aureus (MRSA)?

Staphylococcus aureus, also known as “Staph”, is a germ commonly found on the skin or in the nose of healthy individuals. MRSA is a type of Staph that is resistant to some of the antibiotics used to treat infections. It is a common cause of minor skin infections. It also can cause more serious infection like surgical wound infections, bloodstream infections and pneumonia.

How is the MRSA screening test done?

A small sterile swabs, similar to a Q-tip, is used to swab the inside of your nose.

Am I contagious?

MRSA can be on your hands. It can get there from your nose, a wound, urine or blood. This can be spread by anything you touch, if you do not properly clean your hands. Hands must be washed for 15 seconds with soap and water or alcohol hand sanitizer, rubbing hands together until dry. It is important to clean your hands before eating, after using the toilet, after blowing your nose or covering a cough.

What will happen when I go home?

To prevent the spread of MRSA to others:

- Clean your hands often, especially before and after changing your wound dressing or bandage.
- People who live with you should clean their hands often as well.
- Keep taking any antibiotics prescribed by your doctor. Don't take half-doses or stop before you complete your prescribed course.
- Keep any wounds clean and change bandages as instructed until healed or as instructed.
- Avoid sharing personal items such as towels or razors.
- Wash and dry your clothes and bed linens in the warmest temperatures recommended on the labels.
- Tell your health care providers that you have MRSA. This includes home health nurses and aides, therapists, and personnel in doctors' offices.

What will happen if I return to the hospital?

Individuals with MRSA that come back to the hospital will be placed in contact precautions. Additional tests may be done.

Where can I get more information about MRSA?

For additional information on MRSA, visit the Centers for Disease Control (CDC) and Prevention web site at www.cdc.gov/mrsa.

Fall Prevention Guidelines While in the Hospital

Each year, one out of three older adults in the United States experiences a fall. Hoag Orthopedic Institute (HOI) would like to partner with you to keep you safe during your recovery here and at home.

Unfortunately, many falls result in a serious injury, such as hip fractures and head trauma which may require a surgery to fix the injury. Even if additional surgery is not required, your recovery time may be significantly increased if you suffer a fall.

The increased risk for falls is due to many reasons, such as:

- New medications
- Decreased mobility
- Weakness
- Dizziness
- Confusion that was not expected

While hospitalized and during your recovery, the risk of a slip or fall increases.

Most falls happen in or on the way to or from the bathroom.

Because most hospital falls are related to toileting, please call staff to assist with going to the restroom, reaching for a urinal, wiping yourself after voiding or using the commode.

We request that even patients who have been released for walking by the physical therapist please use the call button. Let the nursing staff know that you want to get up and allow us to be of assistance to you.

Also, if you have a recommended assistive device such as a walker, cane, or crutches, you should use the device each time you get out of bed, walk in the room or hallway, or transfer to and from a chair or commode and toilet. This will help support you and improve your balance.

Call, Don't Fall Program at HOI



During your recovery, the risk of a slip or fall increases due to the recent surgery and pain medication. We encourage you and your family to watch the educational video on your in-room television to learn more about how to prevent a fall. If you have any questions or comments please let us know.

Remember: HOI staff members are here to assist you and keep you safe. Let us be of service to you. Please call to have staff assist you to the restroom. If you are deemed unsafe to be left alone in the bathroom, a staff member will stay with you. Your safety is important.

Home Safety and Fall Prevention Tips

Flooring

- Be aware of uneven surfaces both inside and outside your home.
- Remove rugs that can be easily tripped on, especially at top and bottom of stairways.
- Make sure rugs have non-skid backings.
- Make sure rugs and carpets are free of curled edges, worn spots and rips.
- Secure electrical cords out of the way.
- Eliminate obstacles from pathways both outside and inside the home.
- Have mats at doorways for people to dry their feet on to prevent slipping.

Bathroom

- Make sure grab bars or safety rails are securely anchored over the tub, in the shower and near the toilet.
- Ensure tubs and showers have non-skid surfaces or safety mats inside and outside. Be cautious of wet floors.
- Use a non-skid rug on the bathroom floor.
- Use of a raised toilet seat or commode frame may be necessary.
- Keep toiletries in an easy to reach receptacle.

Kitchen

- Prepare simple meals using stovetop or counter-level appliances to avoid bending. Make food ahead of time, store in small containers, then place in freezer for heating later.
- Move frequently used items to shelves and counters that are easy to reach. This can minimize unnecessary and unsafe reaching.

Lighting

- Maintain adequate lighting in all areas, eliminate shadowy areas.
- Use night-lights in bathrooms or in hallways.
- Check to make sure light switches are within easy reach and at proper height.

Furniture

- Sit in chairs with arm rests to help you get in and out of the chair.
- Place firm cushion or pillow on seat of chair or couch.
- Do not use a step stool to reach items in high cupboards, get help.

Stairs

- Make sure handrails are securely fastened.
- If you have a large flight of stairs separated by a landing, place a chair with arm rests on the landing.

Footwear

- Select footwear that stays securely on your feet. Shoes that have non-skid soles.

Assistive Devices

- Make sure the equipment is in proper working condition.
- Make sure the rubber tips of the crutches, canes and walkers are in good condition.
- Consider the use of a walker bag. Do not try to carry anything in your hands while you are using a walker.

Energy Conservation Tips

- Store frequently used items at waist level or within arm's reach.
- Store commonly used items on upper shelves of refrigerator.
- Use a Lazy Susan, or adaptive equipment (reachers) for easier reach.
- Allow yourself extra time to get ready.
- Take several rest breaks – sit when necessary.

Personal Precautions

- Be alert for unexpected hazards like out of place furniture, pets, children and toys.
- Avoid rushing to answer the phone or doorbell.
- When carrying objects, make sure your vision is not obstructed.
- Do not carry items that are too heavy; check the weight of the item first.
- Do not turn or twist your back to reach or lift object. It is much easier to move closer or turn your whole body and feet toward a wanted object, rather than risk losing your balance.
- Take time to regain your balance when you change positions, i.e., going from lying down to sitting and sitting to standing.
- Keep your eyeglass prescription up to date.
- If you live alone, have daily contact with family, friends or neighbors.
- Provide a place for your pets to be kept while you are walking around the house.

The staff of Hoag Orthopedic Institute is pleased to have assisted you through your hospital stay. We hope, with the use of this patient guide, we have helped you achieve a speedy recovery.

Take care of your spine! Remember to continue using proper body mechanics and good posture at all times.

HOI HOSPITAL



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