



Spine Surgery Class

Thank you for joining, your host will be on at 11:50am.

Getting You Back To You

HOI Spine Program Manager

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Get Well Loop

- HOI's messaging engagement tool
- Please sign up when invited
- Please complete the patient outcome surveys



HOI Website

HoagOrthopedicInstitute.com



Hoag Irvine Expansion

- ✓ **Hoag is embarking on a transformative expansion of our Irvine campus to better serve Irvine residents and the surrounding communities.**
- ✓ **You will see some areas of our campus under construction as we continue through this process.**
- ✓ **Construction is taking place daily Monday through Friday. During this time, you may hear construction noise, feel vibrations or smell nuisance odors due to normal construction activities.**
- ✓ **The Hoag Hospital Irvine main entrance will continue to remain open for patients and visitors.**
- ✓ **It is our goal to minimize the impact of this construction activity as much as possible and please rest assured that patient care and safety remain our top priority.**

Hoag
Orthopedic
Institute



The Spine

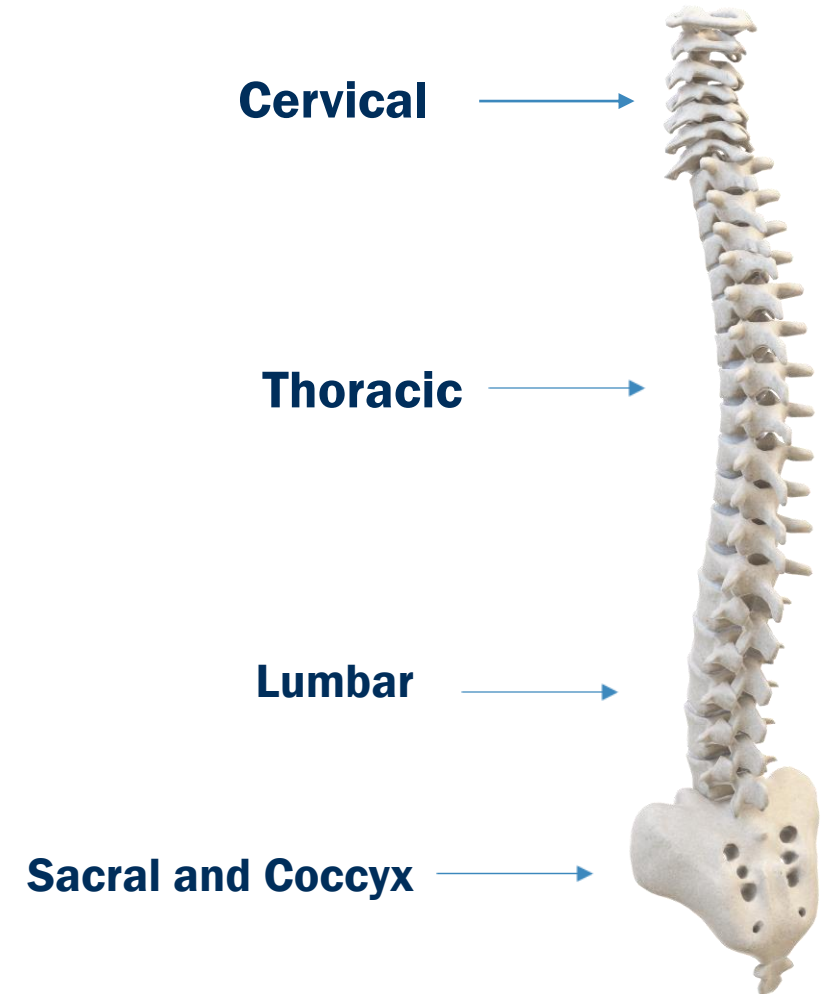
A healthy spine provides support for the body and protection for the spinal cord.

The spine is composed of:

- **24 vertebrae**
- **23 intervertebral discs held together by ligaments and muscles**

Four regions of the spinal column:

- **Cervical (C1-C7)**
- **Thoracic (T1-T12)**
- **Lumbar (L1-L5)**
- **Sacral**
- **Coccyx**



Descriptions for Surgical Approaches

Anterior: “front surface of the body” or
“in front of”

Lateral: “to the side of” or
“away from the middle of the body”

Posterior: “the back” or
“behind”



Anterior



Lateral



Posterior

Types of Spine Surgeries

Cervical Surgeries:

- **Cervical Discectomy and Fusion**
- **Cervical Artificial Disc Replacement**

Lumbar Surgeries:

- **Lumbar Fusion**
- **Laminectomy**
- **Coflex**
- **Kyphoplasty**
- **Microdiscectomy**



Pre-Surgery: Preparation

A Pre-admission Screening Coordinator will contact you after your surgery has been scheduled

- **Assist with scheduling diagnostic tests (EKG, laboratory tests, urinalysis, possible chest x-ray)**
- **Some testing will be done outside the hospital where insurance dictates**
- **Schedule a pre-op call with your Hoag Orthopedic Institute Nurse Navigator**

A Financial Counselor will call to start the pre-admit process

- **Review your insurance coverage, benefits, and upfront costs or payments directly related to your hospital stay**
- **Bring your photo ID and insurance card on the day of surgery**
- **Please bring a form of payment if needed**

Medical and/or Specialist Clearances

- **These clearances can help optimize your recovery**
 - **cardiologist, pulmonologist, endocrinologist, etc.**

Pre-Surgery: Plan Your Recovery

Start planning your recovery at home now

Determine who will help you

- **Spouse, family members, friends**

Determine where you will recover

- **Your own home, at a family member or friend's home**

Plan to have your caregiver be available

Always have a plan for home, even if you desire to recover at a rehab facility

- **Admittance to a rehab facility cannot be guaranteed**



Pre-Surgery: Plan Your Recovery

Home is the best place to recover

- ✓ **Less chance of infection**
- ✓ **More active at home**
- ✓ **More comfortable**
- ✓ **Familiar home setting**
- ✓ **Privacy**
- ✓ **Free to establish your own routine**
- ✓ **Eat the food you are used to**



Pre-Surgery: Plan Your Recovery

Caregiver help needed at home:

- Reminding of restrictions
- Cooking
- Laundry
- Housekeeping
- Shopping
- Errands
- Pet care
- Carrying of items
- Driving

Possible help needed:

- Dressing changes
- Showering
- Brace application



Pre-Surgery: Plan Your Recovery

Clothing:

- **Wear loose, comfortable clothes that are easy to get on and off**
- **Choose shoes with closed toes and backs that you can slip on and off**

Cervical Patients:

- **Wear button-up shirts**



Pre-Surgery: Plan Your Recovery

Create a “when can I list” to review with your surgeon:

- **Return to work**
- **Traveling**
- **Driving**
- **Dental care – when to stop before surgery and when you can go after**
- **Add questions that are important to you**



Pre-Surgery: Home Preparation

Fall Prevention

- **Get up slowly**
- **Create clear pathways in your home**
- **Remove loose throw rugs**
- **Make arrangements for pets**
- **Use night lights**
- **Create charging stations**
- **Make sure you have non-skid surfaces in and near the bath / shower**

Proper equipment keeps you safe and helps prevent pain.



Pre-Surgery: Home Preparation

Your “Safety Zone”

- Your “**safety zone**” is the area between your shoulders and hips
- Arrange frequently used items in your “**safety zone**”
- This prevents bending and reaching thus reducing your chances of falling and ensures you can maintain your spine precautions



Pre-Surgery: Durable Medical Equipment (DME)



Shower Chair



3:1 Commode



Toilet riser



Front wheel walker

Check with your insurance **prior** to surgery to see what DME is covered. Think about what you might need. 3:1 commodes, toilet risers, shower chairs, and beds are **rarely** covered.

Walkers are often covered. *Our case managers can help with walkers during your hospital stay.

Stay as active as possible

Regular Bowel Movements

- Stay hydrated, high fiber foods
- Have a plan

Stop drinking alcohol

Stop all tobacco products

- Need help?
 - www.lung.org
 - www.nobutts.org



Pre-Surgery: Optimizing Nutrition Prior to and After Your Surgery

Begin increasing protein intake a few weeks before surgery to build up strength and to help with healing post operatively.

- ✓ **Focus on high quality proteins such as poultry, lean beef, eggs, nuts, seeds, fish**
- ✓ **Consider an oral nutrition supplement/drink for additional protein intake**

A registered dietitian will be available post-operatively to address any questions or concerns

Cervical spine patients will be on an altered textured diet (ground / pureed food) after surgery due to swelling. This assists with swallowing.



Pre-Surgery: Hydration

THE DAY OF SURGERY:

- You may drink clear liquids up to 3 hours before your scheduled surgery time.
- Limit the clear liquid volume to **1½ cups** or **12 ounces** per hour.

What can I drink and NOT drink the day of surgery?

Allowed	DO NOT CONSUME
Water	Milk or Dairy Products
Apple & Cranberry Juice	Citrus Juices
Gatorade or equivalent carb containing sports drinks	Prune Juice
Ensure® Pre-Surgery Carbohydrate Clear Nutrition Drink	Juices with Pulp
<u>Plain</u> Coffee or Tea. No milk or creamer.	Alcoholic Beverages

Pre-Surgery: Stopping Medications that Thin the Blood

Consult your prescribing physician for when to **stop a **PRESCRIBED blood thinner****

Consult your surgeon for when to **stop **hormone replacement****

NSAIDs need to be **stopped 7 days prior to surgery**

Prescription Blood Thinner Examples:

- Aspirin
- Coumadin (Warfarin)
- Eliquis (Apixaban)
- Lovenox (Enoxaparin)
- Plavix (Clopidogrel)
- Pradaxa (Dabigatran)
- Xarelto (Rivaroxaban)

NSAID Examples:

- Aspirin -Bufferin, Ecotrin, Aspercreme...
- Aspirin containing drugs
- Ibuprofen – Advil, Motrin, Nuprin
- Naproxen – Aleve
- Voltaren – diclofenac
- Mobic – meloxicam
- Celebrex – celecoxib
- Indomethacin

Pre-Surgery: Stopping Herbal Supplements and Dietary Supplements

Stop taking herbal and dietary supplements **14 days** before surgery

Herbal supplements are derived from different parts of plant.

They come in many forms including:

- tablets, capsules, teas, tinctures, oils, lotions, or ointments

Examples of herbal supplements:

- echinacea, ephedra, feverfew, green tea, garlic, ginkgo biloba, ginseng, ginger, golden seal, kava, licorice, saw palmetto, Valeria root, Saint John's wort, turmeric, flaxseed

Examples of dietary supplement:

- omega-3 and fish oil



Preoperative Universal Decolonization

Chlorhexidine gluconate (CHG) is both a soap and antiseptic that kills germs on contact.

- **CHG** safely binds to the skin and can continue killing germs for up to 24 hours.
- **CHG** has a cumulative effect, so the protection against germs increases with repeated use.

Nasal antiseptic

- **Nasal antiseptic** has been shown to inhibit the growth of bacteria in the nose over a period of up to 12 hours in studies.
- You will be given **CHG** soap and a **nasal antiseptic** at the pre-op visit with your surgeon. Start using **CHG** five days prior to surgery.
- **Day of Surgery:** Do not apply lotion, creams, powder, or makeup on the day of surgery.

Prior to Surgery

Things to Know	Decolonization	Day of Surgery
<ul style="list-style-type: none">• No eating or drinking per your surgeon instructions• Arrival time to the hospital will be given to you by your surgeon's office• If you are unable to make your surgery time due to unforeseen circumstances, call the pre-op department at: 949-727-5027	<ul style="list-style-type: none">• Use chlorhexidine soap and nasal sanitizer as directed. Instructions are in the kit given at your surgeon's office• Clean your sheets 5 days before surgery and the night before• Wear clean nightwear• Keep pets off your bed	<ul style="list-style-type: none">• Take a last shower with CHG• Brush your teeth• Wear loose comfortable clothes • Thank you for arriving on time to HOI

Evening Before Surgery: Preventing Constipation

Many patients experience constipation after surgery due to taking narcotic pain medication, anesthesia, **decreased appetite, and decreased mobility.**

What can I do to prevent post-operative constipation BEFORE my surgery?

If you are prone to constipation or have been taking narcotic pain medication, we recommend you take a one-time dose of over-the-counter MiraLAX (Polyethylene Glycol 3350) the evening prior to surgery.

What dose I should take?

Usual dose: Add 17 grams of powder (fill to cap line) to 4-8 ounces of beverage (see bottle for further instructions).

Follow the protocol exactly, do not take more as this can cause you to have a bowel movement on the operating table and increase your risk of infection.

Ask your doctor before taking if you have Irritable Bowel Syndrome or known gastrointestinal issues.



Pre-Surgery Preparation: Nurse Navigator Call

Your Nurse Navigator Call takes place approximately one week before your surgery:

The nurse will review your:

- **Health History**
- **Home Medications:**
 - You **MAY** be advised to **bring home medications** that are not carried in our pharmacy
 - If advised to bring medication, the medication must be in its labeled container
 - Otherwise, **DO NOT** bring any medications from home



What to Bring to HOI

Bring:

- **Closed toed shoes, orthotics, inserts, or special shoes**
- **Loose fitting clothing (shorts, PJs, house coat-shirts,)**
 - **Button front shirts for cervical spine surgery**
- **Hygiene items, hearing aides, glasses, dentures**
- **Cell phone, tablet, laptop, ear buds, charger.**
- **C-PAP**



Do not bring valuables:

- **Jewelry, watches**
- **Purse / Wallet**
- **Medication (unless instructed to do so by your Nurse Navigator)**

Day of Surgery: Arrival at Hoag Orthopedic Institute (HOI)

Park in the parking spaces across from Hoag Orthopedic Institute entrance.

Check in at the registration office located to the left of the lobby entrance.



You will be escorted to pre-op while your family remains in waiting area.

- **You will change into a patient gown**
- **An IV will be started**
- **Consents will be reviewed**
- **Your anesthesiologist will discuss the anesthesia plan and pain management**

HINT: BRING YOUR READING GLASSES



HOI Pre-Operative Room

Once you are prepared for surgery, one family member may join you until you are taken to the operating room.

A pre-op nurse will be asking your family/support person for contact information.

It is highly encouraged for your family/friend to keep your valuables (**cell phone, laptop**) while you're in the operating room. They can bring your valuables up to the patient room after you arrive from the recovery unit.



HOI Operating Room

Anesthetic medication will be given.

If your surgical team feels it is necessary, a urinary catheter may be placed in your bladder.

You will be positioned on a bed or table that is specially designed for spine surgery.

Your surgical area will be scrubbed with surgical prep.



HOI Post Anesthesia Care Unit (PACU)

The PACU nurse will:

- **Continuously monitor your vital signs (temperature, pulse, respirations, blood pressure)**
- **Check circulation and nerve function**
- **Monitor and treat your pain**
- **Your surgeon will contact your family or designated person to discuss your surgery**
- **Patients are transferred to the orthopedic unit when medically stable**

- ❖ **Pre-planned day of surgery discharges leave from the PACU. These surgeries are discussed at the pre-op visit.**



Your Hospital Stay Experience on the HOI Orthopedic Floor



The Nurse Practitioner Team

The Nurse Practitioners at HOI are advanced practice clinicians specializing in orthopedics and an extension of your surgeon. They collaborate with your surgeon to ensure you receive the highest quality of care during your hospital stay.

- **Daily rounding includes:**
 - **Physical assessment**
 - **Diagnosis and treatment**
 - **Ordering or needed tests**
 - **Prescribing of needed medications**

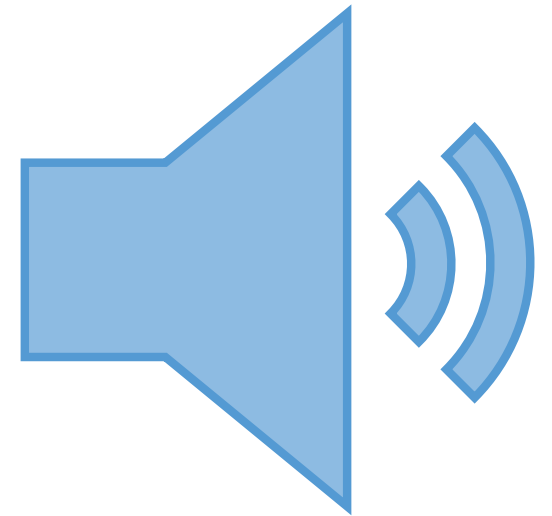


We will **ALWAYS** make every effort to provide a quiet and relaxed atmosphere.

On occasion, you may experience common hospital noise from equipment and/or other patients and visitors.

Ear plugs and relaxation videos are available. Let your nurse know if you are being disturbed by the noise.

Quiet time reinforced from 2pm–4pm & 10pm -6am. Staff may limit the number of visitors to adjust the noise level for others to sleep and rest.



Call, Don't Fall Program at HOI

During recovery, the risk of a slip or fall increases.

Let us be of service to you.

Please call to have staff assist you:

- ✓ **To the restroom**
- ✓ **Stand**
- ✓ **Get out of bed**
- ✓ **Sit in chair**
- ✓ **Ambulate**

Please watch the educational video on your TV to learn more about how to prevent a fall.



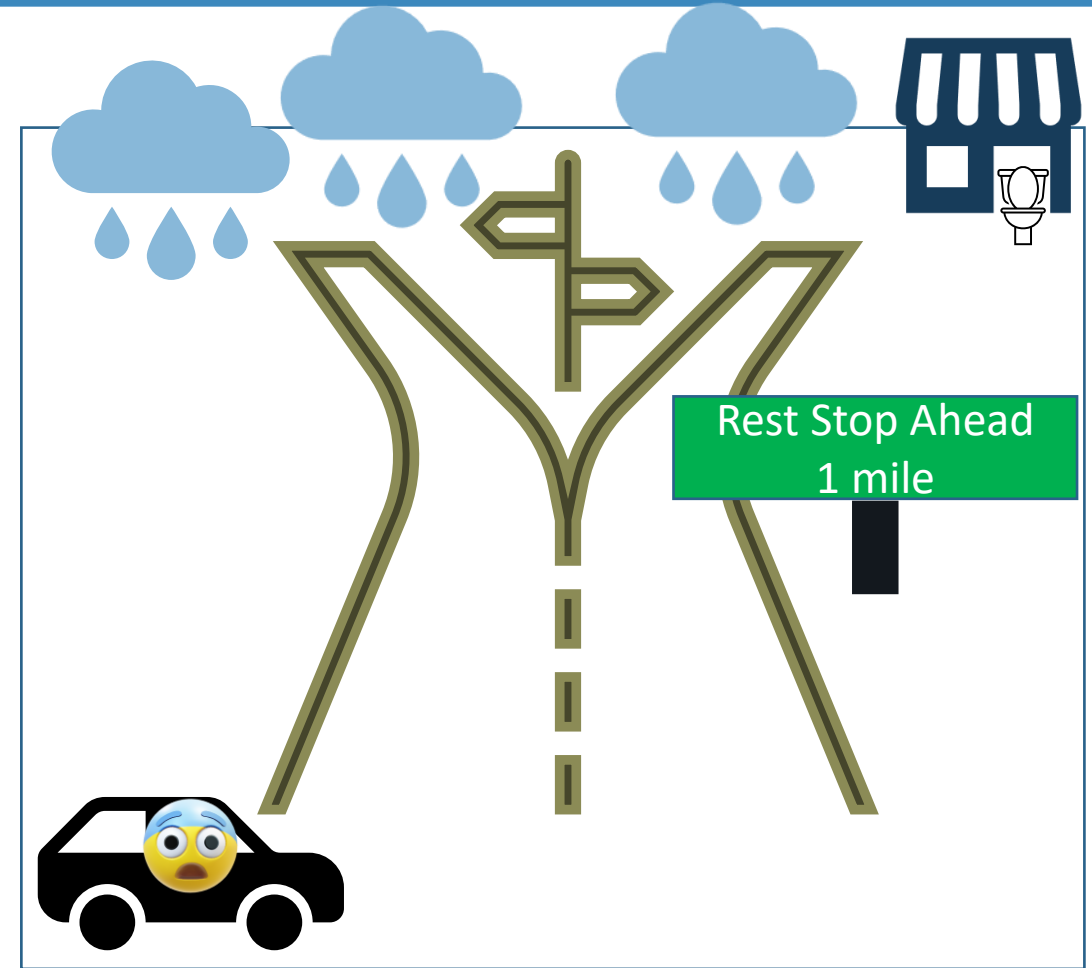
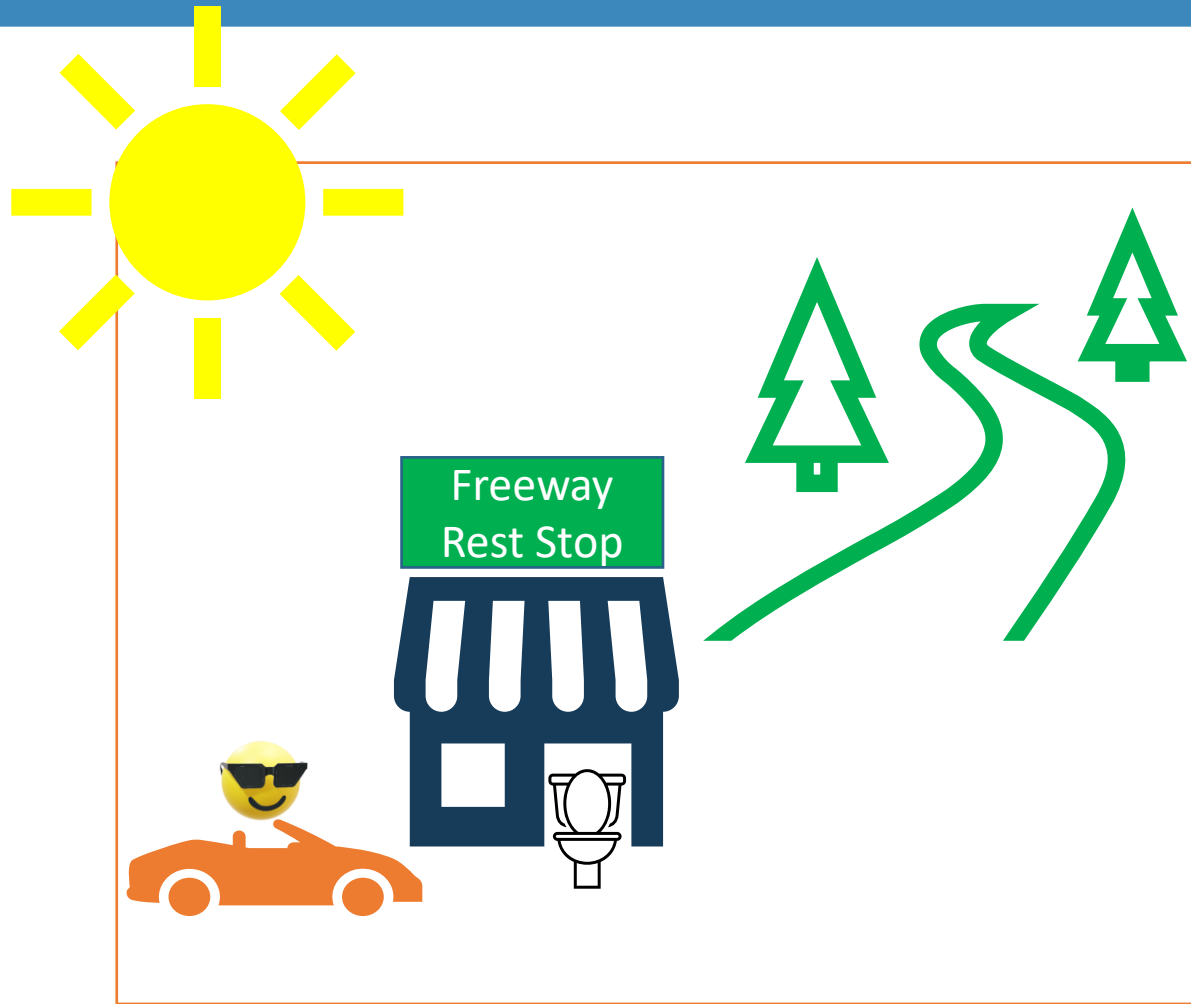
The Hospital Stay

When a staff member is in the room:

- Ask for what you need
- Ask for what you might need
- Don't be shy, all of us are here to **ALWAYS** make you as comfortable as we can



The Bathroom



Your comfort is our top priority. Our response times are under five minutes.....
But five minutes can feel like a lifetime if your really need to go.
We suggest “trying” whenever staff is in the room.

Equipment and Attachments Used During Your HOI Stay



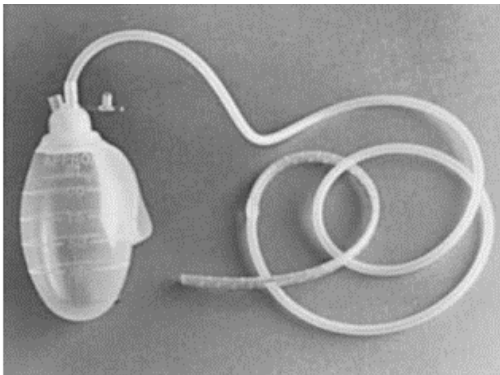
Drains



IV Fluids



SCDs (sequentials)



Indwelling Urinary Catheter



You will start with ice chips and advance to clear fluids (juices, broth, or Jell-O) when the nurse deems it appropriate. Your diet will be advanced as ordered and upon nurse's assessment.

Let us know if you need a special diet (vegetarian, vegan, Keto, lactose, etc.). A Registered Dietitian is available to assist with any diet modifications to meet your nutritional needs.

Cervical Spine: your RN will assess your ability to swallow each day.

Please call your nurse to help you to a chair for meals.

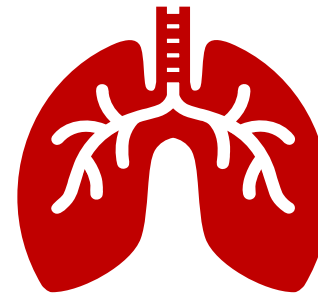
Using an Incentive Spirometer



1. Sit up straight and tall and hold the spirometer in your hands.
2. Take a deep breath in and let it out.
3. Place the mouthpiece in your mouth. Make sure your lips completely cover the mouthpiece.
4. Breathe in slowly through the mouthpiece (like sucking through a straw)
5. Keep the range indicator (little marker on the side chamber) in the target zone.
6. Breathe in until the piston gets to your mark.
7. Hold your breath in for 3 seconds and then let it out.
8. Repeat as prescribed, about 10 breaths every hour, but not 10 times in a row.

Deep Breathing without an Incentive Spirometer

1. Sit up straight and tall
2. Relax
3. Take a deep breath, slow breath in
4. Hold your breath in for 3 seconds
5. Let it out.
6. Repeat about 10 breaths every hour, but not 10 times in a row



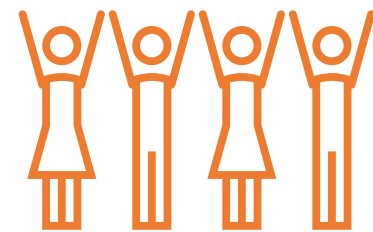
Recovery Precautions: Lumbar Surgery

NO BLT!

No Bending



No Lifting



No Twisting





Sleeping Positions:

Side Lying:

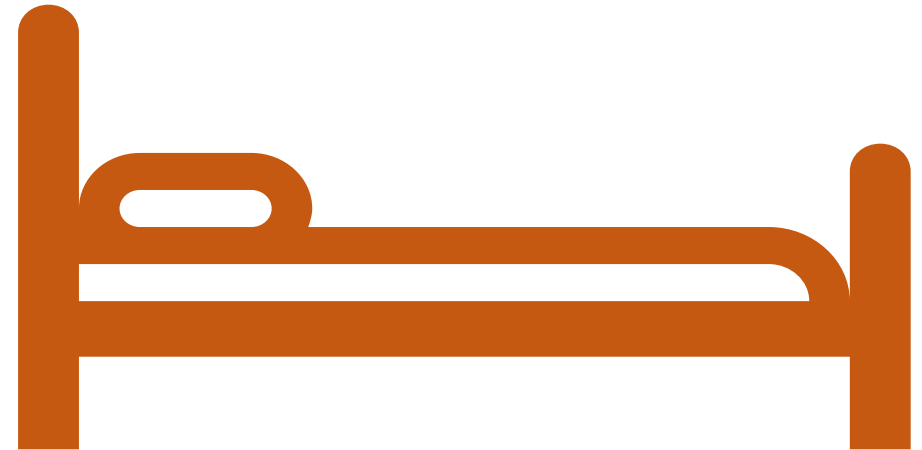
- Rest on your side, knees bent, and a small pillow between your knees

Back:

- Make sure your knees remain bent with a pillow under your knees

Do Not sleep on your stomach

Remember your precautions



Recovery Body Mechanics: Cervical Surgery

Avoid excessive motion at the neck

- **Keep your head and shoulders aligned**
- **Pivot on your feet and turn your whole body**

Avoid reaching

Avoid lifting

Avoid slouching



Recovery: Time For Physical Therapy

Physical Therapy Goal: Safe Discharge

Exercises at HOI

- **Maintaining precautions with activity**
- **Log Rolling**
- **Getting in and out of bed**
- **Getting up and down from a chair / bed**
- **Walking**
- **Use of stairs**
- **Getting in and out of a car**
- **Application of brace (if applicable)**



Exercises are focused on a safe discharge. Rigorous exercises are not performed until you have been cleared by your surgeon and are done in the outpatient setting.

Please bring in any brace, orthotic device or special footwear that you may use for walking.

Walkers:

- **If you are borrowing a walker or have one from a previous procedure, have it brought to the hospital. Our staff will fit it correctly to you.**
- **If you need a walker, our case management team will work with you.**

A family member/caregiver is to participate in at least one physical therapy session.

Recovery: Occupational Therapy

Occupational therapy focuses on improving activities of daily living and offers ideas to assist you in creating a safe home environment.

Some adaptive equipment that may be helpful to remain independent during your recovery include:

- ✓ **Bedside commode/shower chair**
- ✓ **Reacher**
- ✓ **Sock-aide**
- ✓ **Long-handled bath sponge and shoehorn**
- ✓ **May be obtained from most medical supply stores, pharmacies, or online**
- ✓ **If you know you need equipment, please purchase it before surgery**



Recovery: Cervical Collars



Hard Collar



Soft Collar

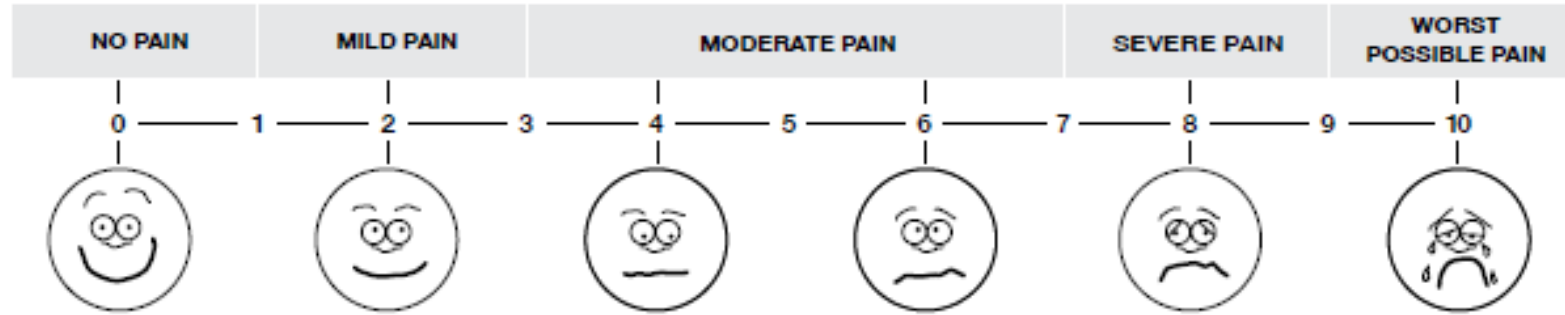


LSO Brace
lumbar-sacral orthosis



TLSO
thoracolumbosacral orthosis

Pain Management: Communication



Describing your pain will help us to help you

Use descriptors:

Aching

Burning

Cramping

Gnawing

Heavy

Hot

Sharp

Shooting

Sickening

Splitting

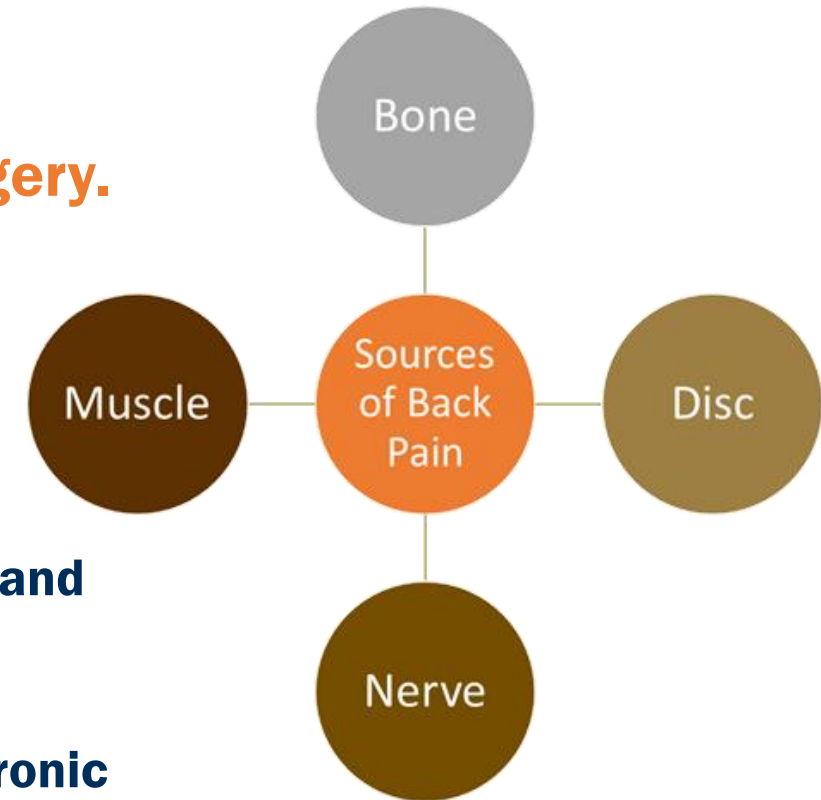
Stabbing

Tender

Throbbing

It is normal to have pain and discomfort after spine surgery.

- **Please be aware that you will not be “PAIN FREE.”**
- **It is ALWAYS our top priority to manage your pain.**
- **Your nurse will review the pain management plan and set goals and dispense pain medications accordingly.**
- **Pain management physicians are available if you suffer from chronic pain.**
- **Repositioning in the bed may provide comfort. Call for help to be repositioned.**



Pain Management: Tools

Movement

- **Slow and safe**
- **Move in your bed**
- **Get out of bed for meals**
- **Take short, frequent walks**

Correct Positioning

- **Remember your precautions**
 - **No bending, lifting, or twisting**
 - **Use equipment to help maintain precautions**

Ice

Relaxation / Distraction

Virtual Reality (available at HOI)

Medication



Pain Management

To ensure the best possible pain relief, your doctors use a pain control approach called multimodal analgesia.

The main goal is to decrease your need for opioid medications.

Multimodal pain management includes non-steroidal anti-inflammatory medications, Tylenol, muscle relaxer meds, relaxation music and opioid medications especially when other medications do not give you enough pain relief.



Discharge

The Hoag Orthopedic Institute team will work carefully with you and your family to plan your discharge. You will receive clearance from your surgeon, hospitalist, and physical therapist prior to discharge from the hospital.

You will be swabbed for MRSA if you stayed overnight.

Please view the discharge video on TV.

Please plan accordingly to have your ride available.

Care Managers specialize in helping you and your family navigate and plan for discharge.

Please contact the Case Management office at 949-727-5439 if you have questions.



Have a Plan

Establish a plan with your surgeon before surgery

- **Pick up stool softeners and laxatives before your surgery**
- **Stool softeners and / laxatives will be started at HOI**
 - **Continue your softeners and / or laxatives until you are regular and off narcotics**
- **Drink 8-10 cups of water a day**
- **Increase your fiber intake**
- **Get Moving – take short, frequent walks**



A DVT (deep vein thrombosis) is a rare surgical complication. It is important to know the signs



Let your surgeon know if you:

- Have new swelling in one leg not related to an injury, and
- Your calf (back of lower leg) is tender or painful when you push on it, or
- Your calf feels warm or hot to touch compared to the other leg

Prevent Blood Clots:

- Get moving
 - Take short, frequent walks
 - Perform ankle pumps when sitting or lying down



Home: Your Dressing

Dressing Changes

- Wash your hands
- Dressing change instructions will be given to you at discharge

Monitor Your Dressing:

- Look, don't touch
- Make sure it's secure
- Identify if you are seeing changes:
 - Drainage amount, what the skin looks like around the dressing



Showering

- You may shower **3** days after your surgery
 - You will be notified if your procedure requires a longer time between surgery and showering
- You will be instructed on if your dressing needs to be covered or is showerproof



Call your surgeon if you have any:

- **Signs of infection:**
 - **Fever over 102 degrees Fahrenheit**
 - **Redness, swelling, warmth around the dressing / incision, or drainage of pus**
 - **Severe vomiting or cannot keep food down**
- **Changes in sensation**
- **Cervical Patient:**
 - **Hoarseness**
 - **Persistent swallowing difficulties**



Thank You for Choosing Hoag Orthopedic Institute

Patient Satisfaction at HOI – Always striving for a 10 out of 10!

To continually monitor and improve the experience of our patients, we have partnered with Press Ganey to conduct patient satisfaction surveys.

If you are one of the patients randomly selected to participate, we appreciate your time in completing the survey and returning it in the accompanying postage paid envelope at your earliest opportunity.

We read every survey and rely on this feedback to make any changes that may benefit future patients.



WE GET YOU BACK TO YOU!