



Baylor Scott & White

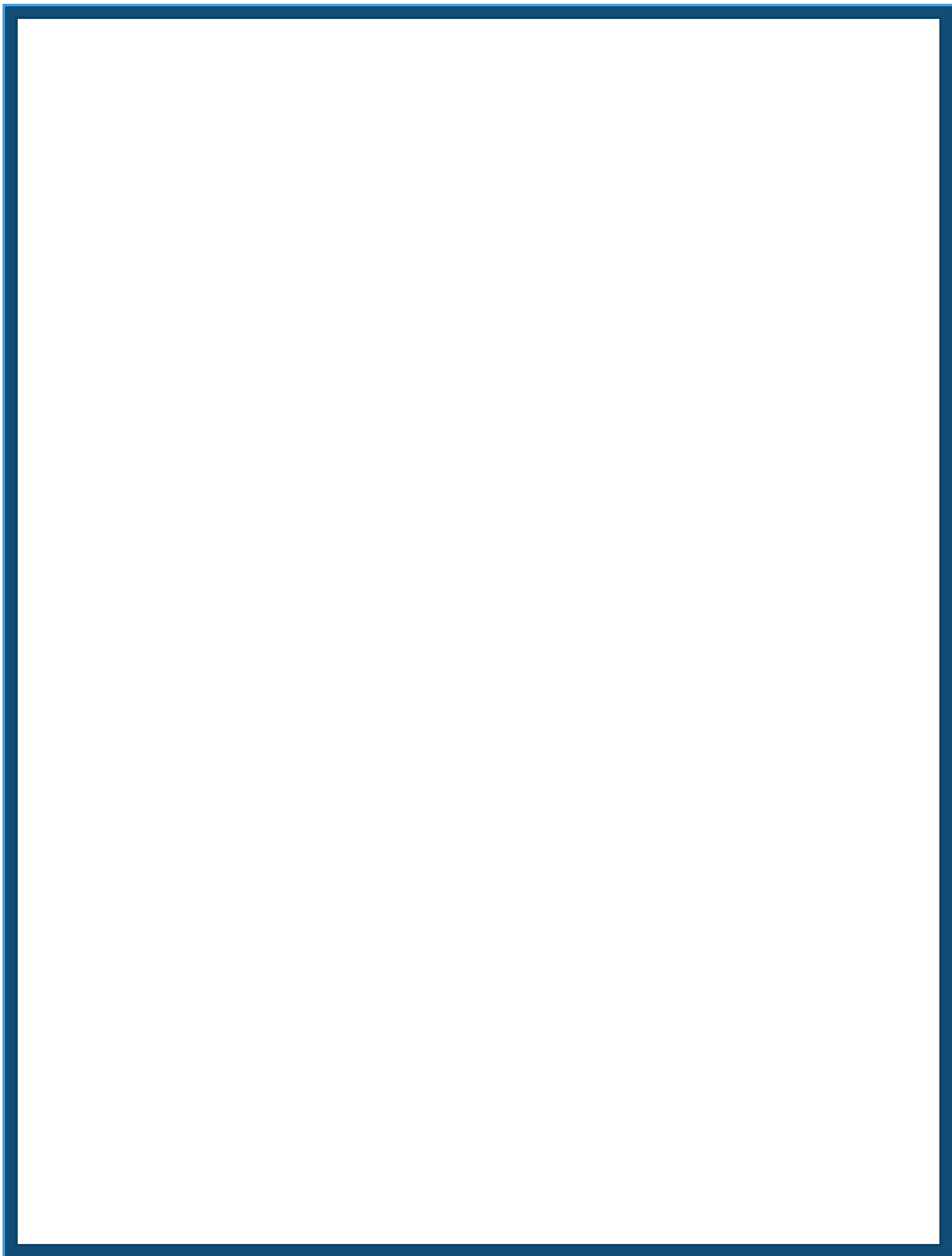
SURGICAL HOSPITAL

FORT WORTH

Joint ownership with physicians



Patient Pathway to **SPINE SURGERY**



Welcome to Baylor Scott & White Surgical Hospital at Fort Worth

Hello,

Thank you for choosing our hospital to start your journey toward a more functional and less painful life. We know your decision to have surgery has not been made lightly. Our team focuses on spine surgery and believes in creating an excellent experience for every patient, every time. Through teamwork with you, your doctor, and our staff, we will work towards the best outcome for you.

Our team has created a “pathway” that will help you with pre-surgery preparation and education, your hospital stay, and your recovery at home.

Your path begins with education for you and anyone who will be helping you before and after your surgery.

This book will provide you with information about your upcoming spine surgery. We have included a pronunciation guide throughout this book for the medical terms to help you understand your surgery. Please bring this book with you to the hospital during your stay.

Your involvement is important to our team. Together, we can achieve your goals: improving the quality of your life with less pain and better mobility.

Thank you for choosing Baylor Scott & White Surgical Hospital at Fort Worth. We look forward to working with you for a successful surgery and recovery.

Paul DeBona, MS-CAD, BSN, RN, CASC, CNOR

Chief Executive Officer

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Baylor Scott & White Surgical Hospital at Fort Worth

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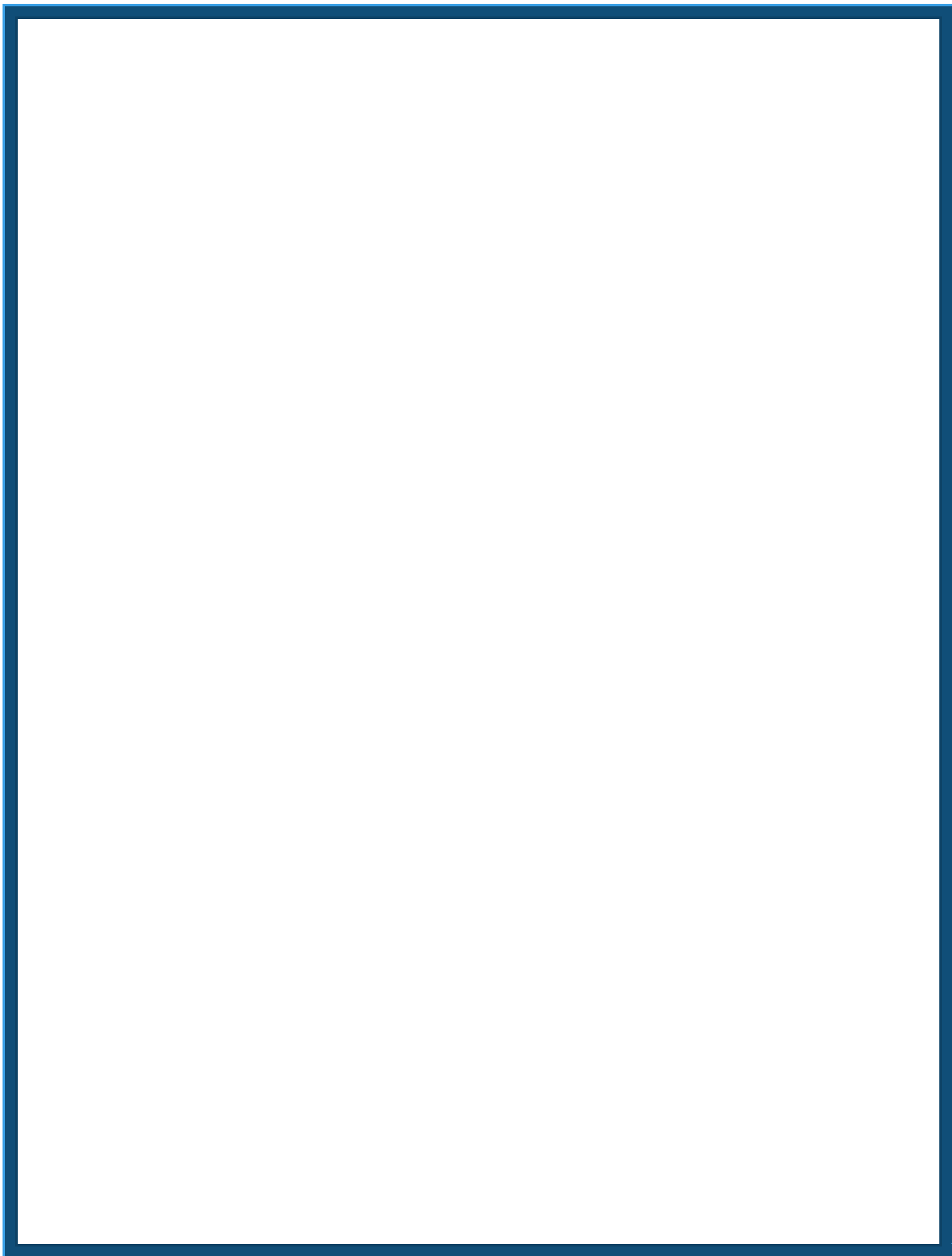


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FINANCIAL CONSIDERATIONS

Your Surgery Financial Responsibility

Baylor Scott & White Surgical Hospital focuses on caring for the needs of our patients and their family. Below is information related to the bills you will receive from the hospital, doctors, services, and other professionals involved in your care.

The Hospital:

- Using the information your doctor gives us we will talk with your insurance company to estimate your total out of pocket bill
- The estimated out of pocket bill can change if your hospital stay is longer than planned
- Your hospital fee covers the costs associated with the hospital, nursing care, and supplies used for your surgery
- A patient financial advocate will contact you before your surgery to talk about payment options

Your Doctors:

- You will receive a separate bill from your doctor's office
- Please talk your doctor's office for an estimated cost for your surgery

Anesthesia [an-uh s-thee-zhuh]:

- The anesthesiologist, the doctor that puts you to sleep for surgery, and their team are not employees of the hospital
- You will receive a bill from this group, you can ask your doctor the name of the group they use to get an estimate

Doctor's Surgery Team:

- If your doctor uses a Physician Assistant (PA), Registered Nurse First Assist (RNFA), or Nurse Practitioner (NP) they may bill for their services separately.
- Please ask your doctor if they use any of these professionals for your surgery

Lab work, pathology, and radiology services:

- If you have lab work drawn before or after your surgery you may receive a bill from these service providers.

Medical Equipment:

- Medical equipment such as a walker, cane, braces or sequential compression devices (SCDs) are not included with your hospital fee.
- Your case manager and the physical therapy team will help you decide what items you need to purchase, based on the recommended recovery plan from your doctor.

Questions to Ask Your Insurance Company?

1. Is the anesthesia group in my network?

Surgery Hospital Anesthesia group: _____

- a. If the answer is no, is there a process to follow to receive full benefits because this is the anesthesia group that your doctor utilizes?
2. Does my policy cover home physical therapy care?
 - a. How many sessions per calendar year?
 - b. What is the co-payment for each session?
3. Does my policy cover outpatient physical therapy care?
 - a. How many sessions are covered per calendar year?
 - b. What is the co-payment for each session?
4. Does my policy cover durable medical equipment and is there a co-payment?
 - a. Neck/Back Brace _____
 - b. Raised toilet seat _____
 - c. Shower chair _____
 - d. Bedside commode _____

PREPARING FOR SURGERY

Spine Surgery Overview: Understanding the risks of Spine Surgery

As with any type of surgical procedure, there are risks to spine surgery. Though problems are rare, measures are taken to minimize these risks. Your doctor will discuss these risks with you and answer any questions you have. We suggest that you write down any questions before meeting with your doctor so you do not forget them. After you discuss the surgery with your doctor, you will be asked to sign a consent form stating that you understand the risks, benefits, and potential problems that could occur during and after your surgery. Some of the potential risks include, but are not limited to:

- Nerve damage
- Spinal fluid leak
- Infection
- Bleeding
- Blood clots in legs or lungs
- Failure to fuse
- Hardware problems
- No improvement or worsening pain
- Paralysis [puh-ral-uh-sis] – loss of muscle function in a part of the body
- Heart attack, stroke or death

Your Important Role in Your Health Care

You can make your experience safer and more successful by being an active and informed member of your health care team.

Speak up about the concerns you have, your health is important! Ask questions if there is anything you don't understand. You have the right to know.

- Look for information about illnesses or conditions that affect you
- Keep records about your medical history and medications you take to share with doctors
- Ask your doctors, nurses, pharmacists, and other health care providers about how the surgery may affect your current condition
- Take notes when you talk with your doctor
- You may want to ask for a second opinion to feel confident in your plan of care
- Learn about any equipment you may need to use after your surgery
- Make sure you read and understand any forms you are required to sign

Surgical Hospital Benefits to Patients

Although not all patients meet the requirements to have the surgery done at a surgical hospital, those who do qualify usually elect to undergo this path to recovery. Patients who have their surgery performed in a surgical hospital setting enjoy various short term benefits without losing any long-term results. The surgical hospital setting is generally safer, convenient, and a less stressful environment when compared to bigger hospitals

Other benefits include:

- Returning home the same day as surgery or within one to three days of surgery
- Easier access – registering, checking-in and checking-out at the center is often easier when compared to a larger hospital
- Lower risk of infection because the surgery hospital does not have “sick” patients
- More comfort because you rehab at home during the early stages of recovery
- Reduced recovery time due to less invasive procedures
- Quicker return to your normal activity level

Family Member and Caregiver Support

Family members, close friends or caregivers are important members of your surgical team. They help you before your surgery and throughout your recovery. Please review this book with your family or caregiver prior to surgery. Also, remember to introduce these individuals to your doctor.

Family members/caregivers will need to help with:

- Getting you to and from the hospital
- Providing support around the home during the first week after discharge
- Meal planning and household chores

Pre-surgery Testing

Most arrangements for the tests will be made through either the hospital or your doctor's office. Tests may include any of the following:

- Laboratory tests
- History/Physical examination
- X-Rays
- Dental clearance (within 6 months)
- Screening for Methicillin Resistant Staphylococcus Aureus (MRSA)
- Other evaluations, as indicated

Lowering the Risk of Infection

Baylor Scott & White Surgical Hospital Fort Worth takes every precaution to reduce the risk of surgical site infection. Certain bacteria, called Methicillin Resistant Staphylococcus Aureus or MRSA, is a bacteria that can cause infection after an operation. Typically patients who get an infection already have this bacteria in or on their body before surgery. Most of these patients do not have symptoms.

Those who carry these organisms typically have it in their nose and may have it on their hands and skin. MRSA is passed from person to person by touch from someone who carries it. Without precautions, this bacteria can get into a MRSA carrier's surgical incision after surgery.

Your doctor may test you for this bacteria before your surgery. If it is present they will prescribe a regiment for you to follow to remove the bacteria from your body. Testing for MRSA is simple, and treatment is also very easy. Based on your doctor's orders we may swab your nose to check for MRSA. If it is present your doctor will prescribe a nasal ointment or preoperative skin scrub in order to limit the chances of an infection

PRE-SURGERY BATHING

Pre-surgery Skin Preparation

The purpose of a pre-surgery bathing is to lower the risk of infection. During your pre-surgery education, our pre-admissions testing team will review the bathing instructions and how to use the special soap. You will find instructions for use of the special soap below. If you have questions about the process, please contact our pre-admissions testing team.

Bathing Instructions Using Chlorhexidine Gluconate (CHG)

We take every precaution to prevent surgical infections, and **you** are an important part of the process. Three days prior to your surgery, your doctor wants you to shower with a special soap, called Chlorhexidine Gluconate [CHG], to lower the risk of infection during surgery. The soap removes bacteria from your skin to prevent surgical site infection. ***This product should not be used if you are allergic to Chlorhexidine Gluconate (CHG).***

SHOWER (no baths) schedule:

1. Three (3) days prior to surgery, shower from neck to feet
2. Two (2) days prior to surgery, shower from neck to feet
3. Night prior to surgery, shower from neck to feet
4. Morning of surgery, shower from neck to feet

Showering Steps:

1. In the shower rinse your body with water and wash hair with your normal shampoo
2. Rinse your hair and body thoroughly to remove shampoo
3. Turn water off to prevent rinsing off soap too soon
4. Using the shower schedule, use at least 2 tablespoons (enough to fill up a ping pong ball) of the CHG soap
 - **DO NOT use CHG near the eyes, ears or genitals to avoid irritation or injury to those areas**
 - Use a new bath scrunchie or a freshly laundered cloth for each application
 - Wash your body gently for five full minutes
 - Do not scrub the skin too hard
5. Wash your whole body with the CHG soap, paying special attention to the area where the surgery or procedure will be done
 - **DO NOT wash with regular soap after the CHG soap**
6. Turn the water back on and rinse your body thoroughly
7. Pat dry with a clean, soft towel
 - If possible allow the area of the surgical procedure to air dry
8. If you lose or run out of the special soap, CHG can be purchased at most pharmacies without a doctors order
9. Be sure to use the entire bottle of CHG over the 4-shower schedule
10. Be sure to wear freshly laundered clothing after each shower



PREPARING FOR SURGERY

Home Safety Steps

It is important to set up your home prior to surgery so it is as safe as possible for you while you recover. Consider these points BEFORE SURGERY:

Stairs:

- Stairs should have sturdy handrails on both sides
- Remove all objects on the stairs
- Look at the number of stairs there are to access and get around your home
- Having a family member or caregiver present to assist you up and down stairs is recommended

Bathroom:

- Patients with stand-up shower stalls may need a shower chair for safety
- Grab bars are helpful when getting in and out of the tub or shower
- Remove throw rugs from the area
- Have a caregiver clean up any water on the floor

Bedroom and Common Living Areas:

- Before surgery move items that could be a trip hazard such as low tables, rugs, and cords.
- Arrange items in cabinets and dresser drawers so things you commonly use are at counter height – not too high and not too low. You should not bend over for items below your waist and you should not stand on stools.
- It may be difficult to sleep while lying flat. A recliner or an area where you can sleep in a propped up position using extra pillows may be more comfortable. You need to check with your doctor about the sleeping position they recommend based on your surgery. Also, ask about other sleeping requirements while laying down with the type of brace you will have

Children and Pets:

- You may need to explain to kids that they have to be careful around you for a few weeks. You should not carry them and they should not jump on you.
- Have sanitizing hand gel available for your guests, children, and caregivers. Everyone should use sanitizing hand gel often to avoid potential infections.
- Make a plan for your pets during your recovery. Pets can trip you or knock you over if they get too excited.
- Pets may also be a source of germs so keep your pet clean and avoid letting them sleep on you until your surgery site is completely healed (no scab or skin breakage)

Pre-surgery Medication Safety Checklist

Some medications you take may lead to a higher risk surgery because they cause blood to thin leading to a higher risk of bleeding after surgery. If you take medications that contain **aspirin, anti-inflammatories** (such as Ibuprofen, Naproxen, Motrin®, Advil®, Aleve®, etc.), **blood thinners** (such as Coumadin®, Xarelto®, Eliquis®, Plavix®, Lovenox® or Pradaxa®) or **arthritis medications**, ask your doctor when to stop taking these medications. Also, let your doctor know if you are taking any vitamins or herbal supplements. **Your doctor and pre-assessment nurse will instruct you on which medications or supplements to stop taking before surgery.**

Below are the some medications that can affect your surgery. Be sure to tell your doctor about ALL the medications you take, including over-the-counter products. **Please do not take your usual medications the morning of your surgery unless told to do so by your doctor and pre-assessment nurse; take the medication with a small sip of water.**

Heart Medications

Heart medications are usually taken the morning of surgery. If you see the cardiologist on a regular basis, your doctor may require a clearance from your cardiologist.

Blood Pressure/Anti-Hypertensive Medications

Blood pressure medications are usually taken the morning of surgery and following surgery. Even if you are not supposed to eat or drink on the day of surgery, your doctor may recommend that you take your blood pressure medicine with a sip of water. **If your blood pressure is not under control the day of surgery, your surgery could be delayed or rescheduled.**

Blood Thinners/Anti-Coagulants

Blood thinners such as aspirin, Coumadin®, Xarelto®, Eliquis®, Lovenox® or Pradaxa® should be stopped before surgery. Your doctor will tell you how far ahead of time to stop your medication. In some cases, you take a shorter acting blood thinner that can be taken up until a few hours before surgery. You will restart blood thinners after surgery as soon as your doctor feels it is safe, usually within 24 hours.

Diabetic Medications

If you take insulin or oral diabetes medications, tell your doctor. Surgery can raise your blood sugar, so your insulin dose may need to be adjusted on the day of surgery and during recovery. In addition, some oral diabetic medications should be stopped before you are given anesthesia.

Steroid Medications

If you have recently taken a course of steroids, make sure to tell your doctor and anesthesiologist. Steroid medications, such as Prednisone®, can interfere with the healing process

Dietary Supplements

Tell your doctor about any over-the-counter dietary supplements and herbals you are taking because they can interact with medications that may be needed during or after your surgery.

Pre-surgery Nutrition

Drink enough fluid prior to surgery

Drink enough water, about 8 glasses a day, prior to surgery. Limit the number of drinks high in sugar, caffeine, or sodium. Your doctor may change these guidelines if you have other medical conditions, please discuss your case before your surgery.

Make sure your protein intake is adequate EVERY day: 2 or more servings a day

Protein helps your body heal. It can be found in meat, fish, poultry, eggs, dairy products, and beans.

Eat more fiber

Some of the medications you will be taking can lead to constipation, difficulty having a bowel movement, after surgery. By eating more fiber, found in foods like raw fruits, vegetables, whole-grain breads or muffins, cereals, nuts and beans, you can avoid constipation. You may need a stool softener after surgery which can be bought from your local pharmacy.

Make sure you are getting enough iron

Take iron and vitamin C as directed by your doctor. Dietary iron is in lean red meat, dark green leafy vegetables, egg yolks, raisins and prunes. Avoid taking iron with milk.

Make sure you are getting enough calcium: 1,500mg daily is recommended

Calcium is needed by your body to strengthen your bones. Milk, yogurt or cheese all have calcium, eat these foods throughout the day.

REMEMBER: You need vitamin D to absorb calcium. Vitamin D is found in multiple vitamins, milk products, fortified cereals and calcium supplements.

Pre-surgery Healthy Options

Decrease your alcohol intake

It is recommended that you drink less than two alcoholic drinks per day and none at all for two days before your surgery. Excessive alcohol intake can lead to complications with healing. Talk to your doctor about ways to quit or limit your drinking.

Stop Smoking

Patients who smoke get more infections. Talk to your doctor about how you can quit smoking. Some doctors will not perform surgery until their patient has stopped smoking.

CAR TRANSFERS TO PREPARE FOR RECOVERY

- If possible, sit in a seat of the car with lots of leg room
- If you have fabric seats, a plastic bag or sheet will help you slide more easily
- If you ride in the front seat:
 - Move the seat back as far as you can for more room to move your legs around
 - Slightly tilt the seat back for more room to lean back as you turn your body in



Back up to seat



Reach back to the seat



Slowly lower yourself onto the seat (it may help to use the door frame for support)



One at a time, bring your feet in and adjust the seat to your comfort (Your caregiver may help by lifting your legs behind your knees)

REMEMBER: If you have a long ride home (longer than 45 minutes), you will need to stop, get out and walk around every 30 minutes to help prevent blood clots in the legs.

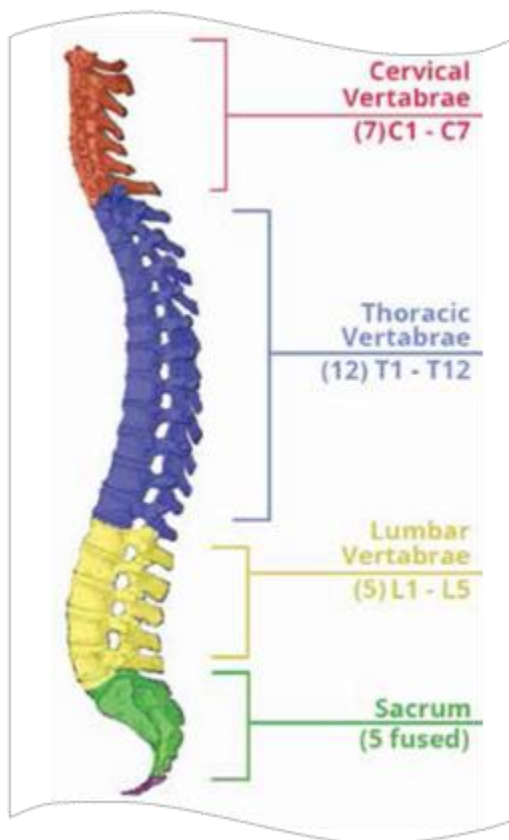
UNDERSTANDING YOUR SURGERY

Understanding the Spine Anatomy

The spine is one of the most important systems of your body. The spine provides support for your body and allows you to stand up and move freely. The spinal cord is protected within a canal that is created by the stacked vertebrae [vur-tuh-bruh]. The nerves of the spinal cord connect your brain with the rest of your body and allows for body movements and sensing the world around you.

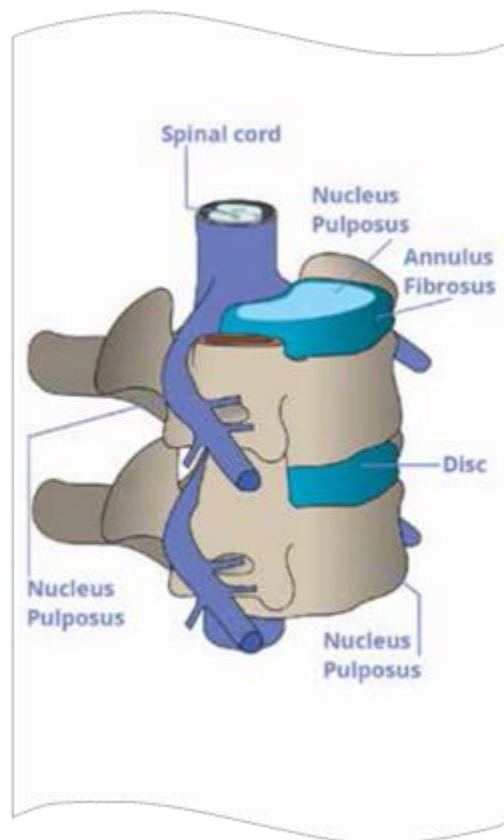
Spine Structure Overview

The spine is made of 24 bones called vertebrae. Between each vertebrae is a flat round disc which acts as a cushion. Each disc is made up of two parts – a tough outer layer called the annulus [an-yuh-luh s] surrounding a gelatin-like center called the nucleus. Between the back of the vertebrae are facet joints. These small joints are covered with cartilage and help with movements in the spine. The lower portion of the spine is made from two bones, the sacrum [sey-kruh m] and coccyx [kok-siks], which provide stability for the lower part of the spine.



Vertebrae

7 Cervical (neck), 12 Thoracic [thaw-ras-ik] (middle back), 5 Lumbar (lower back)



Disc

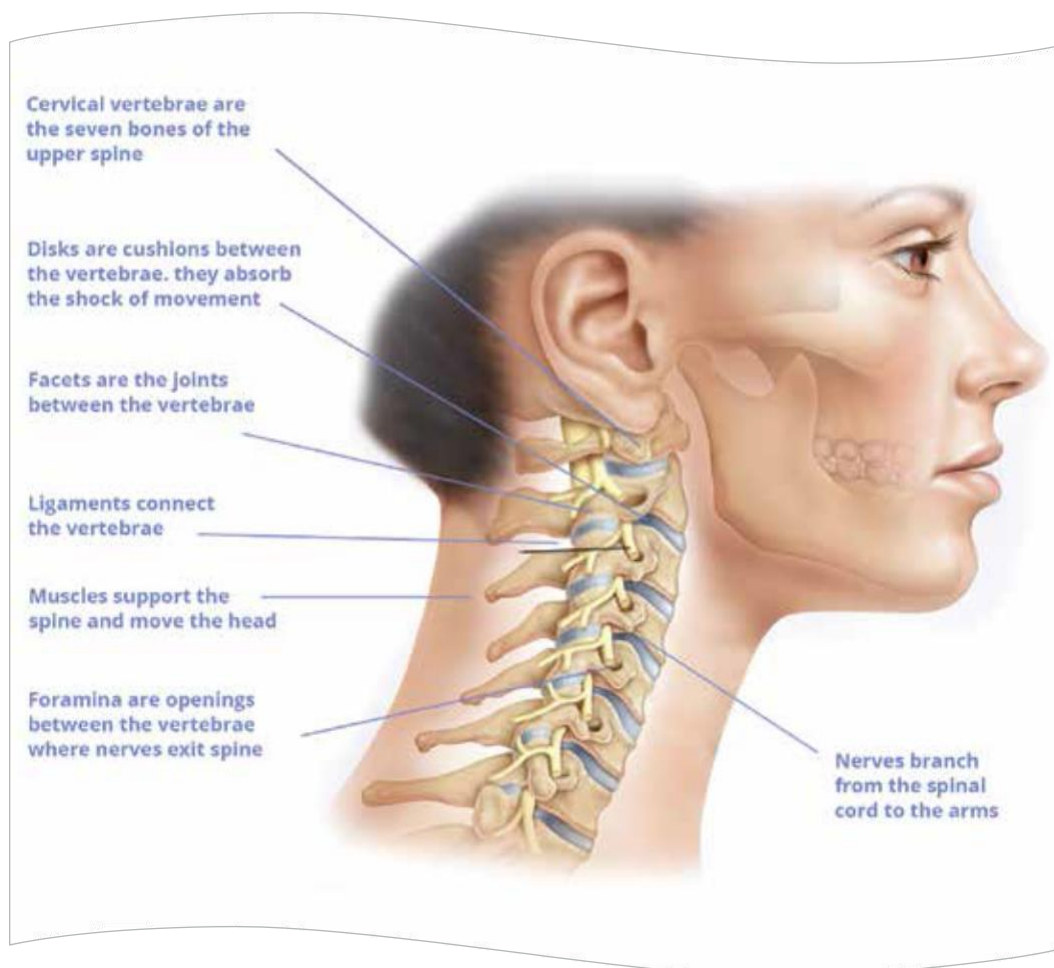
Function as “shock absorbers” and gives the spine flexibility to move

Understanding the Spinal Cord Nerves

In addition to the bony spine structure, nerves run through the spinal canal and branch out through the foramen [fuh-rey-muh n] to other parts of the body. The nerves carry messages between your brain and muscles.

Muscles, Tendons and Ligaments

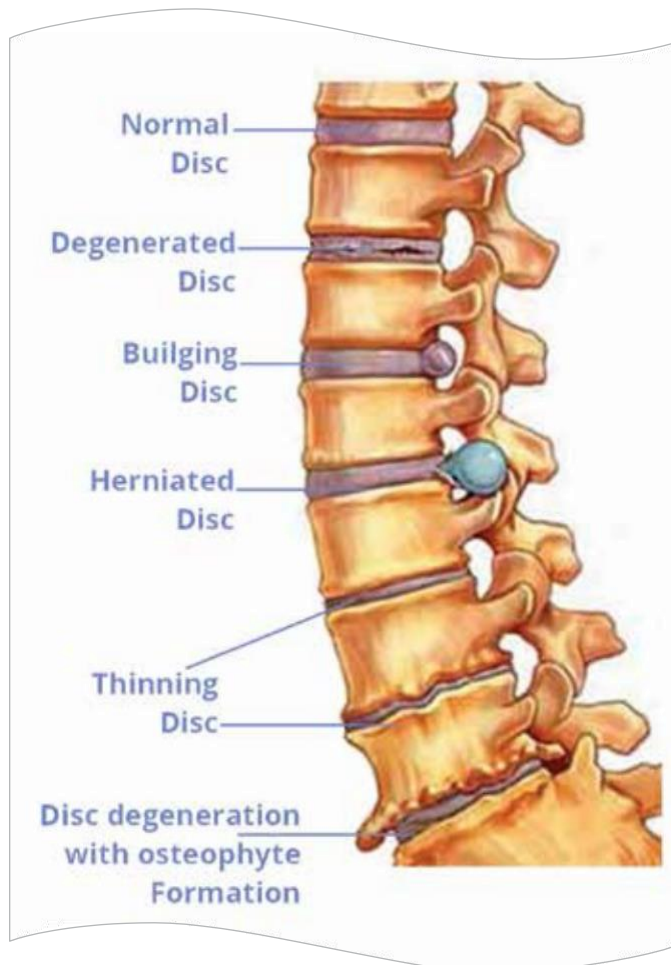
Muscles and ligaments [lig-uh-muhnt] connect vertebrae and provide strength and stability for your spine, while at the same time allow for flexibility. Ligaments aid in joint stability during rest and movement and help prevent injury from hyperextension and hyperflexion (excessive movements). Tendons are somewhat elastic and attach muscle to bone. Together, the system of ligaments in the vertebral column, combined with the tendons and muscles, provide a natural brace to help protect the spine from injury.



Prior to Surgery

Pain and the Spine

Understanding your spine and how it works can help you better understand some of the problems that occur from aging or injury.



Normal Disc-Approximately $\frac{1}{2}$ inch thick

Degenerative [dih-jen-er-uh-tiv] Disc-

With aging, discs begin to wear away and shrink

Bulging Disc – Weakening in the discs cause a protrusion from the normal structure

Herniated Disc – Gelatin-like center pushes through the tough outer layer and causes a large portion to place pressure on the spinal canal and the spinal nerves

Thinning Disc – Often related to the aging process. The inner disc lose water and the outer disc weakens which results in less cushion

Osteophyte [os-tee-uh-fahyt]

Formation – “Bone Spurs” are smooth structures that form over a prolonged period of time as a result of degenerative process

Prior to Surgery

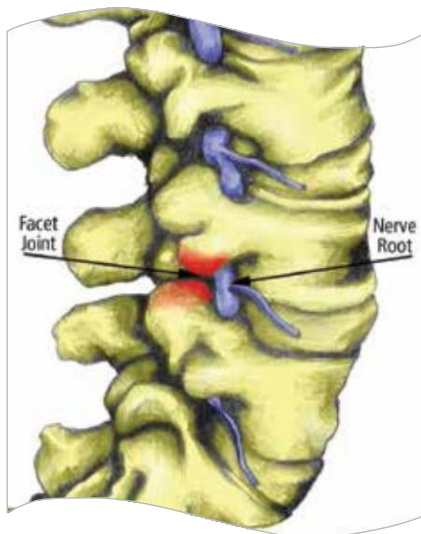
Causes of Spine Pain

Some of the causes of neck pain include muscle strains from overuse, worn joints due to age, nerve compression from herniated discs, injuries, and certain diseases.

There are many causes of back pain. It sometimes occurs after a specific movement such as lifting or bending. Strains (muscle) or sprains (ligaments) of these structures are a common source of low back pain. Just getting older also plays a role in many back conditions.

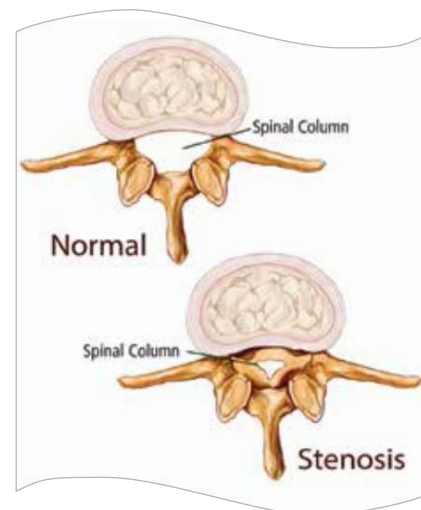
Spinal Stenosis [sti-noh-sis]

Spinal stenosis is a soft tissue and/or bony intrusion on the spinal cord and/or nerve roots often resulting in pain, numbness or weakness. Spinal stenosis commonly occurs in middle age to older adults and is worsened by walking and relieved by sitting. Your provider may order x-rays, CT's, or an MRI to confirm this diagnosis.



Facet [fas-it] Joint Pain

Pain caused by a degenerative disc that collapses completely and causes the facet joints in the vertebrae to rub against one another which can lead to stenosis



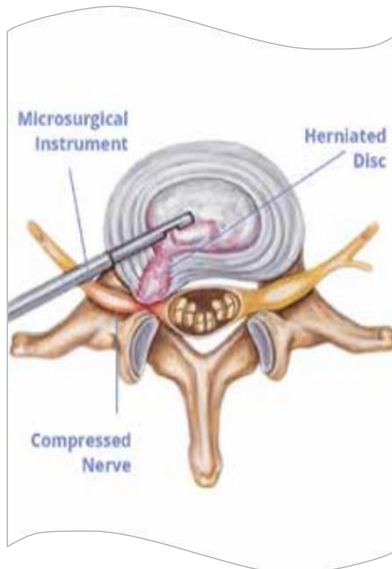
Stenosis

A narrowing of the spinal canal

Prior to Surgery

Spinal Decompression [dee-kuh m-presh-uh n]

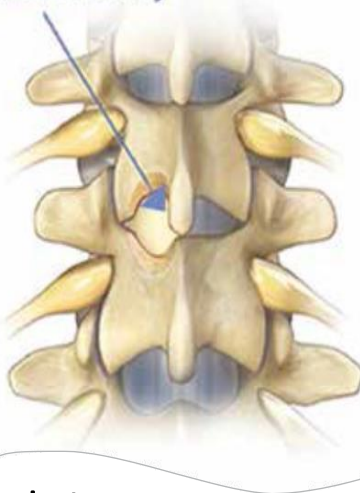
This surgical treatment is done to relieve pressure, causing chronic pain, on one or more pinched nerves in the spinal column. Chronic back pain, related to conditions such as a bulging or herniated disc, sciatica [sahy-at-i-kuh], spinal stenosis and spondylolisthesis [spon-dl-oh-lis-thee-sis], can be draining and affect your quality of life.



Micro Discectomy

A minimally invasive surgical procedure in which a portion of a herniated disc (nucleus pulposus) is removed by a surgical tool or a laser while using a microscope

Laminotomy



Laminotomy

An surgical procedure in which a portion of the lamina [lam-uh-nuh] (a bone in the back of the spinal canal) is removed. In most cases the part of a disc or a bone spur, which is pressing on a nerve, is also removed.

Laminectomy



Laminectomy

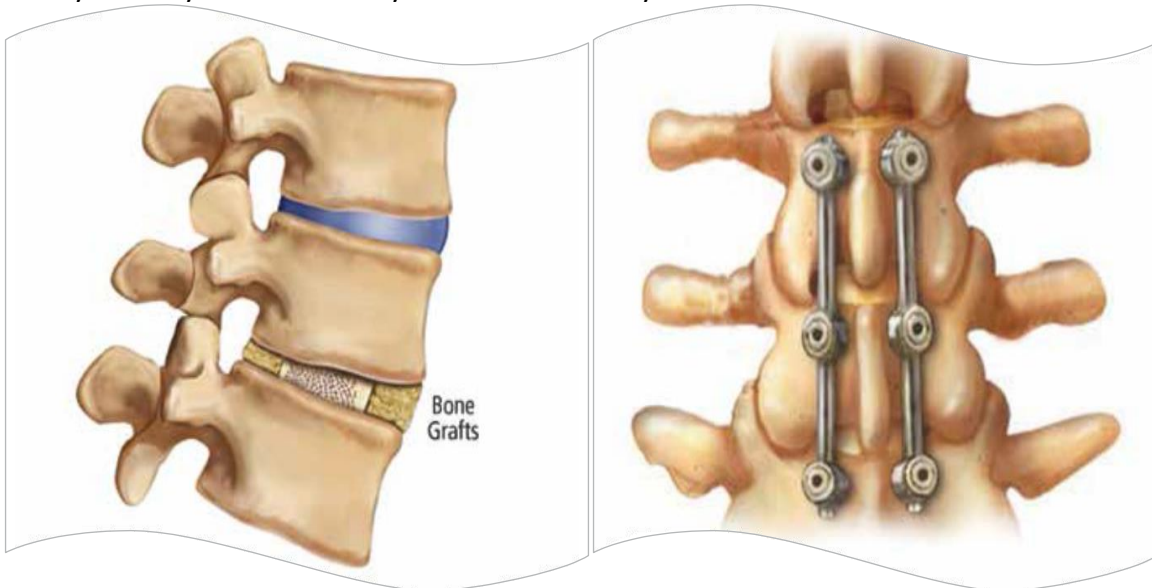
An invasive surgical procedure in which a small portion of the arch of the vertebrae (bone) is removed from the spine to relieve the pressure on the pinched nerve.

Spinal Fusion

A fusion involves bone graft placement around the spine during surgery. The body then heals over several months which joins, or fuses, the vertebrae together. During the surgery, the doctor works in areas that are close to the nerves in the spinal column. To prevent nerve damage nerve monitoring, called electromyography [ih-lek-troh-mahy-uh-graf-ee] (EMG), is used to give the doctor real-time information about nerve position relative to their instruments.

There are many different techniques used to fuse the vertebrae together. It is important that you understand the language used to identify your surgical procedure including the location in need of repair: Cervical (neck), Thoracic (upper back), or Lumbar (lower back). The approach to the surgical site differs with each technique.

The type of fusion that is best for each patient is based on their specific complaints and the cause of symptoms. Your doctor and health care team will determine the best course for you after they assess you and review your medical history.



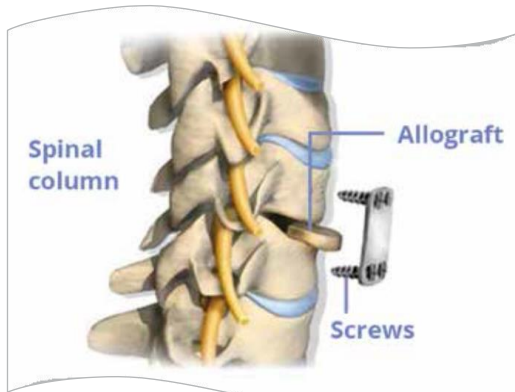
Bone Graft

A piece of bone or man-made material is used to repair or rebuild an area of bone loss. The graft is used to fill an space that was a result of disease injury, or a surgical procedure. This bone can be from an area of the skeleton (yours or a donor) or from a man-made material.

Lumbar Spinal Fusion

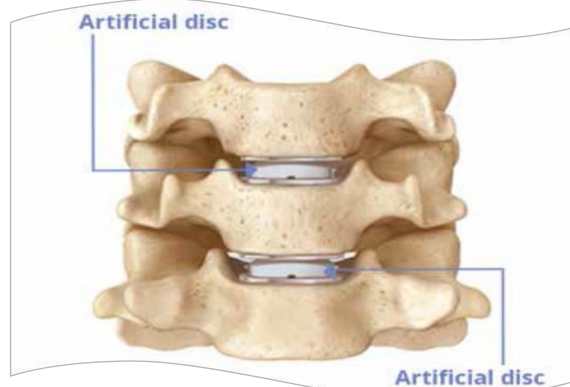
A surgery that allows the vertebrae to grow together. The goal of the lumbar fusion is to have the two vertebrae fuse (grow solidly together) so that there is no longer any motion between them. Additionally, by fusing the two vertebrae together, the growth of bone spurs at that location may stop.

Prior to Surgery



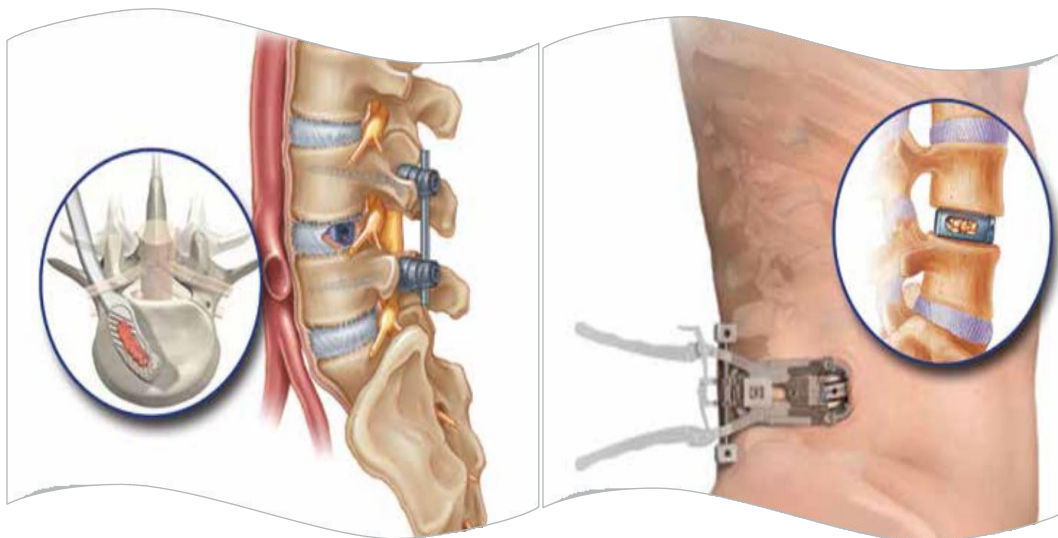
Anterior Cervical Discectomy and Fusion (ACDF)

A procedure used to reach the cervical (neck) area of the spine. The surgery is performed through a small incision in the front of the neck. The disc is removed and replaced with a small piece of bone or other material, which in time will fuse the vertebrae. In some cases, a titanium plate and screws may be added to provide additional stabilization.



Cervical Artificial Disc Replacement (CADR)

An artificial disc is a device that is implanted into the intervertebral space to imitate the functions of a normal disc (carry load and allow motion).



Transforaminal Lumbar Interbody Fusion (TLIF)

The surgeon accesses the spine through your back. Through small incisions that line up with your foramen (open space on the sides of the vertebrae), the doctor operates on your spine to repair any damage and relieve compression on the nerves. It is not uncommon for the doctor to use titanium rods & screws to stabilize the fusion.

Extreme Lateral Interbody Fusion (XLIF)

Differs from traditional procedures because the doctor accesses the spine from the patient's side, instead of the front or back position.

THE DAY BEFORE SURGERY

Preoperative Phone Call

A nurse will call you on the afternoon the day before your surgery to answer any remaining questions and verify your arrival time at the hospital. You will also be given directions to the hospital.

During this phone call you will be instructed to avoid ALL food and liquid after midnight the night before your surgery. You will be reminded which medications you should take the morning of surgery with a small sip of water.

DO NOT eat or drink anything (including water, candy, gum and mints) after midnight the night before your surgery.

- Medications to take the morning of surgery:
-
-

Preoperative Checklist

You will need to meet some physical therapy goals before you can go home. Be prepared for therapy with the following items:

- Loose-fitting clothing: loose shorts or wide leg pants are okay
- **AVOID** sweat pants with elastic cuffs
- T-shirt type tops or open button shirts may work if a back brace is required to be worn
- Shoes for walking with a low heel (less than 1 inch, gym shoes or walking shoes are fine)
- **DO NOT** bring bedroom slippers, flip flop style shoes or open back shoes
- **Note:** You may want to purchase elastic shoe strings (available at most pharmacies) which will help avoid the need to tie your shoes following surgery

**DO NOT eat or drink
anything after midnight the
night before your surgery**

Your Surgery

THE DAY OF SURGERY

Check-In

Upon arrival at the hospital, you will complete registration and finish up any business office details.

Pre-Surgery Holding

Following your check-in at the hospital, the staff will begin to prepare you for surgery. A family member or caregiver may stay with you in pre-surgery holding area until you are moved to the operating room. You may be in pre-surgery holding for 1 to 2 hours or longer based on your doctor's preferences. In pre-surgery holding, you can expect the following:

Nursing (Pre-Op)

- Confirmation of name, date of birth, allergies to medication, surgical site and procedure
- Review of medical history
- Review of all medications you currently take
 - Name of each prescription and over-the-counter medication
 - Dose of each medication
 - How often you take each medication
 - Last dose taken
- Review of advanced directives
- Current vital signs
- IV Start
- Clipper shaving of the operative site
- Neck to toe CHG wipe skin preparation

Doctor

- Bedside interview
- Legible mark of surgical site
- Answer any final questions

Infection Prevention

An antibiotic will be given within an hour of surgery and may be continued for 24 hours after surgery based on your doctor's decision.

Your Surgery

Anesthesia

Anesthesia care is directed by board-certified Anesthesiologist. You will meet your team members in the pre-surgery holding area. Your anesthesia team works together to provide you with a safe anesthetic experience.

General Anesthesia

General anesthesia will put you to sleep following an injection of medications into your IV. After you are asleep, a breathing tube will be placed into your mouth and throat to assist your breathing during the surgery. During the operation, you will be receiving additional medications in your IV and through your breathing tube to keep you sedated throughout your surgery. At the end of your surgery the breathing tube will be removed, however your throat may be sore immediately following the surgery due to the breathing tube.

Anesthesia is very safe, but there are risks. At the time of your surgery, the anesthesia team will discuss these risks with you in detail. Please ask any questions you have at that time.

Operating Room

Inside the operating room, you will be cared for by doctors, nurses, and skilled technicians. One member of the team is a neuromonitoring technician. This person works with the anesthesiologist and doctor to monitor brain signals and tests the nervous system in order to reduce or avoid complications. The total time required for surgery differs from patient to patient depending on the type of procedure. Generally, most surgeries last from 1 to 3 hours, not including the preparation and recovery times.

Family members and caregivers will be updated if a delay has occurred. Keep in mind that a delay does not mean that the doctor is having a problem.

PACU (Recovery)

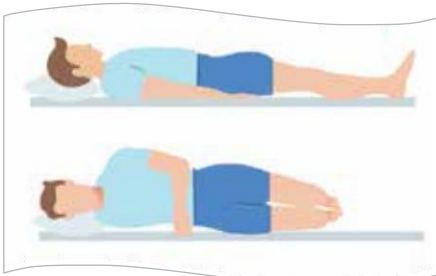
After your surgery, you will be transported to the Post-Anesthesia Care Unit (PACU). Your doctor will meet with your family members and caregivers to provide them with post-surgery updates.

Phase 1 of Recovery: During the first stage of recovery, a nurse will monitor you as the effects of anesthesia wear off. Common side effects include feeling groggy and disoriented. You will spend about 45 minutes in this area.

Phase 2 of Recovery: Your family will join you at your bedside as you continue to emerge from the effects of anesthesia. Nursing staff will monitor vital signs, administer IV fluids, check oxygen level, check your dressings for drainage, perform neurologic checks, provide pain management, and apply continuous compression devices to prevent blood clots.

Your Surgery

Please do not attempt to get out of bed the first time on your own. After surgery, you are at a higher risk of falling. Your family should not try to get you out of bed. You will be instructed on how to get in and out of bed using the log roll method.



Lying Down

Sit on your bed, closer to the head of the bed than the foot of the bed

Scoot back onto the bed as far as you can

Lower yourself onto your side using your arms to help guide and control your body, at the same time, bend your knees and pull your legs into bed.

Keep your knees bent and roll onto your back (move your shoulders and hips together as a unit when you roll)

Your shoulders and knees should always point in the same direction (no twisting)

Sleeping Positions

Back Sleeping: place a pillow under your head and another pillow under your knees

On your side, place a pillow under your head and another pillow between your knees

Getting out of Bed

While lying on your back bend your knees

Roll onto your side (keep your shoulders and hips together as you roll)

Place your bottom hand in front of you at chest level and slowly raise your body as you lower your legs toward the floor

Take a few breaths on the edge of the bed. Ensure that your feet are firmly beneath you before standing up

Do not stand up if you feel light-headed or nauseous (if the symptoms persist, lie back down on your side)

YOUR SURGERY AND RECOVERY

Pain Assessment and Management

Talking about pain is important to help nursing manage your pain successfully. We want you to talk with your nurses and doctors about any pain you experience. Pain may not be completely eliminated right after surgery, however there are several way to help you keep pain levels tolerable. Some of these methods include changing position in bed, applying heat or cold, working with physical therapy, listening to music, and medications.



Be as specific as possible.

- Where is the pain?
- How often do you feel pain?
- On a scale of 0 to 10, where 10 is the worst pain imaginable, how would you rate your pain?
- Is there anything that makes the pain go away?

You will have some pain, which is normal, after surgery. Our goal is to get your pain to a mild level where you can participate in physical therapy. When you have outpatient physical therapy, if you are still having pain, be sure to take pain medication 30 to 45 minutes before your scheduled therapy session.

The pain related to therapy will be managed with oral medications and the doses will become smaller as your pain level is lower.

My Home Pain Medications:

Home Care Planning

Home Care Planning Process

Planning for you to go home begins when you first come in contact with your care team at your pre-assessment appointment. Throughout your stay we will educate you about how to care for yourself when you go home. When all the necessary criteria are met, your doctor will determine where you will finish recovering.

The driving philosophy for the recovery process is that the **BEST place for you to recover is in your own HOME**. For this reason, the case managers will work with you to help you go home following surgery. A member of your care team will call you after your stay so we can answer questions that you have about your recovery while reinforcing your home care instructions. Your success is important to the care team!

Remember, having a good outcome and improved quality of life is a team effort. Your role is to participate with physical therapy, ask questions, and take care of the daily activities that you can.

General Home Care Criteria

The following are general criteria used to assess if you are ready to leave the hospital:

- You are healthy enough to leave the hospital
- All post-surgery goals have been completed
- Home support is available from a family member or caregiver

**The best place
to recover is
in your home!**

Home Care Instructions

Medications

- Look over the medication instruction sheet given to you by your nurse for your prescription medications
- Take prescription pain medication as directed by your doctor
- DO NOT take over-the-counter anti-inflammatory medications (aspirin, ibuprofen, Aleve®, Advil®) until approved by your doctor
- Pain medication may cause constipation- drink lots of fluids and increase your intake of fruits and fibers

Diet

During the first few weeks after a cervical spine procedure, you may have a sore throat and difficulty swallowing

- Eat a well-balanced **soft** diet with foods such as yogurts, puddings, broths, etc.
- Avoid foods such as chips, nuts, hard cheeses, tough meat, and crunchy raw vegetables
- Try smaller bites than usual
- Chew your food longer than normal until you can eat a regular diet

Exercise

Walking is **very** important for the success of your spine surgery

- Start with a short distance and gradually try to walk further each day
- Avoid the extremes of too little or too much, do what you can tolerate
- Allow for rest between activities, this will help you avoid falls

Dressing Care

- Wash your hands with soap and water before touching your incision
- You may have an outer dressing as well as special adhesive strips or sutures over your surgical incision
- Your home care instructions will include information about incision care and dressing changes
- Do not remove the dressing until told to do so by your doctor
- Pat dry and **DO NOT** rub your incision to avoid irritation
- No creams or lotions on the incision unless prescribed by your doctor

Showers (No Tub Baths or Soaking)

- Some dressings are waterproof for up to 5-7 days
- Shower only, DO NOT submerge yourself in baths, swimming pools, lakes etc. until cleared by the doctor
- Use a chair in the shower for instability

Assistive Devices

- It is important to use assistive devices (walkers, canes, etc.) for balance and support
- Continue to use until your doctor tells you to stop

SPINE PRECAUTIONS

To maximize your recovery, follow these precautions for three months after surgery, or as directed by your doctor. To help you remember your precautions, we use the abbreviations **B-L-T**.



-B-
No Bending forward at your waist; avoid slumping posture and rounding of your back.



-L-
No Lifting more than 8 - 10 lbs or as directed by your doctor.
A gallon of milk = 8 lbs



-T-
No Twisting at the back or neck

Other precautions

- If a neck brace is ordered, always wear it as directed by your doctor
- Exercise as ordered you by your doctor or physical therapist
- "Log roll" to get in and out of bed (see page 25)
- DO NOT driving until cleared by your doctor or if you are taking narcotics or other medications that causes drowsiness. However, you may be driven.
- Limit stair climbing to once or twice per day, this will be easier as your endurance increases
- Avoid sitting for long period of times, get up and move at least every hour
 - You may sit in a recliner fully reclined (with your neck brace on if ordered by your doctor)
- The head of your bed should not be raised more than 30 degrees while lying without your neck brace
- You will be given spine precautions that are specific to your procedure during your stay and prior to going home
- If you have any questions or concerns about your spine precautions, please contact your doctor's office.

BLOOD CLOTS

Understanding Blood Clots

Pulmonary Embolism (PE)

Symptoms of a blood clot in the lung (pulmonary embolism) include shortness of breath, sudden onset of chest pain, cough, and sometimes fainting. If you have these symptoms call 911 for emergency care right away. Have a family member or caregiver call your doctor

Deep Vein Thrombosis (DVT)

DVT is a disorder in which a blood clot forms in the deeper blood vessels, particularly in the legs. Having spine surgery increases this risk as does being inactive.

The following symptoms may indicate a blood clot. If you notice any of these symptoms, please call your doctor immediately:

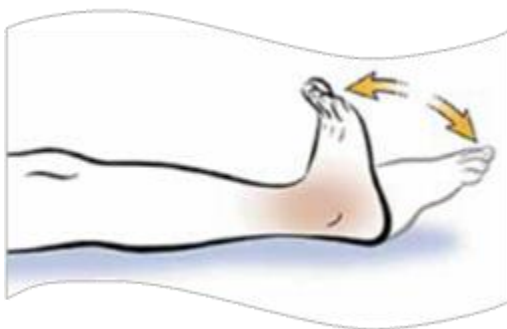
- Your calf is painful and feels warm to the touch
- Persistent swelling of the foot, ankle or calf that does not go away with elevation of the leg above the heart
- Chest pain or shortness of breath, call 911 and seek emergency care right away

Preventing Blood Clots

Clot Prevention

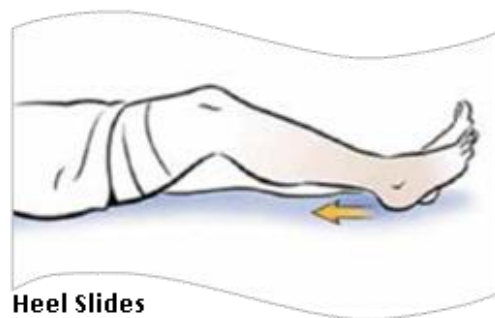
Some simple exercises, especially when combined with early and frequent walking, can to help prevent blood clots from forming. If your doctor orders sequential compression device (SCD) leg sleeves your nurse will discuss this item with you.

These exercises are important in clot prevention, so it is very important that you can do them prior to surgery.



Ankle Pumps

Bend ankles to move feet up and down, alternating feet



Heel Slides

Bend one leg at a time, moving the foot on a flat surface (keep opposite leg straight)

AFTER SURGERY-AT HOME

Controlling Pain at Home

When you return home, you will be able to use different methods pain control methods, such as heat/ice or relaxation techniques. Also, as you heal your pain medication needs should decrease. Slowly increasing the distance you walk and your activity levels will help the process. Follow the range of motion exercises that your doctor provides to help prevent stiff, sore muscles and increase your flexibility.

- You should understand that you cannot expect to be pain-free immediately following surgery
- It is okay to take medication when pain is limits your walking, exercise, or sleep
- Not moving to avoid pain will ultimately contribute to more pain
- When pain is manageable or the prescription pain medication is causing ill effects, it is okay to substitute Tylenol® for pain control
 - Do not exceed 4,000 mg of Tylenol® (acetaminophen) in 24 hours because it can be harmful to your liver
 - The amount of Tylenol® in your prescription pain medication should be counted in the 4,000 mg total over 24 hours
 - Please read the labels carefully or consult with your pharmacist or doctor if you have questions

Guidelines for Use of Pain Medication

- Always take pain medications according to the directions and schedule provided by your doctor. This includes
 - Take the prescribed number of tablets for each dose
 - Follow a schedule to ensure you allow enough time between each dose
- You should take pain medication with meals or at least with something in your stomach
- Do not wait until the pain is severe
 - Pills take 30 to 45 minutes to begin to work
 - If the pain is severe, relief will be slower
- Use pain medication at night for sleep and before therapy as needed
- Notify your doctor if your pain medication causes you to be nauseated, vomit, shaky, disoriented, and unsteady when walking
- Do not drink alcohol if you are taking pain medication
- Do not take aspirin or other anti-inflammatory medications until your doctor tells you it is okay

COMFORT FOLLOWING SURGERY

These tips will help to reduce pressure on your spine before and after your surgery. They should become long-term strategies.

Positioning

Ensure that your mattress has enough support so you do not sink into the bed, a medium stiffness bed is recommended. Also, your pillow should not allow your head to sink to the mattress or allow your chin to touch your chest.

Posture

Sitting

Sit for 20 minutes or less at a time for the first two weeks after surgery. After that you can increase your sitting time to 40 minutes or less until week four. If you start to feel uncomfortable, you can lay down or go for a short walk. Periods of sitting can be repeated throughout the day with a rest period in-between for 30 to 60 minutes.

For good sitting posture:

- Ensure feet are on the ground
 - Do not cross your legs
- Your knees should be just below the height of the hips
- Ensure you are centered in the chair, and not leaning forward or to one side
- Gently tilt your hips forward so that you are not slouching back onto your tailbone
 - A pillow can be placed behind the back for comfort and to keep the spine straight
- Gently draw your shoulder blades back, opening out the front of the chest
- Try to keep your head in a neutral position so your chin is not resting on your chest and the back of your head is away from your spine. Think Tall!

After four weeks, you should be cleared to sit for to an hour or more. However, it is recommended to break up your sitting time by standing up every 30 minutes or so. This can lower your risk for developing heart disease and diabetes, in addition to the positive impact changing position has on your muscles and spine. **KEEP MOVING!**

Alternate tasks or change positions to limit fatigue and tension. Remember to take frequent breaks (every 10 to 15 minutes) if you are doing a single task for a prolonged period.

Standing

Good posture is essential following spine surgery because it relieves stress on the spine.

For good standing posture:

- Stand with your feet hip width apart
- Try to put equal amounts of weight on each leg and stand with your feet flat
- Relax your knees
- Gently draw in your lower tummy and pull your hips in line with your legs and spine
- Gently draw your shoulder blades back
- Try to make sure your chin is not resting on your chest and the back of your head is away from your spine. Think Tall!

Shoes with a low heel (less than 1 inch) are preferred. High heels place more load on the legs and spine, and put added stress on your calves and hamstrings. This can weaken the muscles of the spine.

Walking Programs

Being active is key to a successful recovery. Physical fitness and conditioning have a big impact on preventing and reducing the effects of a back injury. Your walking program should begin immediately after your surgery.

There are many benefits to walking including:

- Improved mood and stress relief (exercise stimulates the release of chemicals in the body to help you feel better during the day and sleep better at night)
- Improved heart and lung function
- Improved mobility
- Improved bladder and bowel function
- When combined with a healthy diet, exercise helps with weight loss
 - reducing weight, particularly around the abdomen and pelvis will assist in reducing the stress on your spine
- Improved balance and posture

Walking is a low impact activity that should be suitable for most people. Make sure to wear good supportive shoes (e.g. running shoes that are not worn out). You may need assistance to put on your shoes for the first two weeks after surgery. Start with a comfortable pace and gradually increase speed. Initially, avoid hills if possible. If you have any questions about a walking program, please ask your physical therapist.

TIPS FOR SUCCESSFUL RECOVERY

Age – unfortunately, the older you are the longer it will take to recover.

Fitness – the higher your general fitness levels before surgery, the faster you will recover. It is never too late to improve your level of activity. Even a small improvement can help with your recovery!

Muscle control – the better your muscle control, strength, and endurance, the faster you will recovery. It is never too late to start improving your muscle control, even a small improvement will help you recovery!

Breathing control –breathing patterns have a direct impact on spinal muscle control. Breathing should be relaxed with air drawn into the bases of the lungs through the use of long slow breaths in and exhaling slowly. Remember to relax the neck muscles.

Symptoms pre-surgery – The goal of surgery is to help with the pain, weakness, and numbness that you have been experiencing. However, severe back or leg symptoms causing weakness or numbness may result in a longer recovery.

Smoking – Smoking, or any type of nicotine intake (including second-hand smoke), increases the risk of complications and interferes with the healing process. If you cannot quit smoking, cutting back would help as you recover from surgery.

Medical health – Other existing medical conditions, such as diabetes, will also slow your healing time. Your other medical conditions should be discussed when increasing physical activity and assessing how well you are healing. Do not overdo it just because you are not experiencing pain. If your leg or back symptoms recur, think about what activities you have been doing over the previous days. Reducing activity in the early stages usually allows symptoms to settle. If they persist even after rest, please speak to your doctor or physical therapist.

FREQUENTLY ASKED QUESTIONS

Q: What activities will I be restricted from after surgery?

A. No bending, lifting or twisting of the back. You can walk as tolerated, as long as you are safe on your feet. Your doctor will tell you when you can return to work and sexual activity.

Q: After surgery, do I have to wear a neck or back brace?

A. Your doctor might order a brace that will be fitted prior to surgery. During the recovery phase you will need to wear your brace per your doctor's instructions.

Q: Can I shower when I return home?

A. Your doctor's home care instructions will tell you when you are able to shower. When you are able to shower you might need someone to assist you the first few times. If your doctor allows you to get your incision line wet, do not target direct water pressure on your incision. Pat your incision dry once out of the shower. If you keep a dressing over your incision, the dressing will need to be changed after your shower.

Q: Do I wear a brace when I shower?

A. You do not wear your brace while in the shower, unless instructed to do so by your doctor. Just remember to **avoid** any bending, lifting or twisting. Talk about the use of a shower chair with your doctor to see if they would recommend one. Shower chairs will make showering easier, but you need to ensure that you are not having to twist and excessively bend to bathe yourself or get supplies.

Q: When should I come back to the doctor's office?

A. You should make an appointment with your doctor 10 to 14 days after surgery. At this visit, X-rays may be taken if needed. Your incision sites will be examined to check for proper healing. Additionally, if you have staples they will be removed at this time.

Q: When can I drive?

A. No driving until your first postoperative visit. At that time the doctor will instruct you when to resume driving. Please keep in mind that you cannot drive while taking narcotic (opioid) medications. However, you may be driven.

Q: Can I travel after surgery?

A. Any travel should be limited to short trips. If you need to take a long car or plane trip, you should walk every 30 minutes. It is a good idea to have your pain medication with you for long trips.

Q: What medications will I take when I go home?

A. You may be sent home with pain medications and muscle relaxants. To prevent constipation while on pain medications, you may continue to take a stool softener daily. Do not take anti-inflammatories (such as Advil® or ibuprofen) unless cleared by your doctor. Remember to keep hydrated with drinking plenty of fluids while you recover.

Q: What should concern me when I go home?

- A. You need to contact the office if you experience any of the following:
- Fever of 101 degrees or greater
 - New redness, swelling or drainage from the incision site
 - Any new weakness in your arms or legs
 - Severe back pain you haven't experienced before

THANK YOU

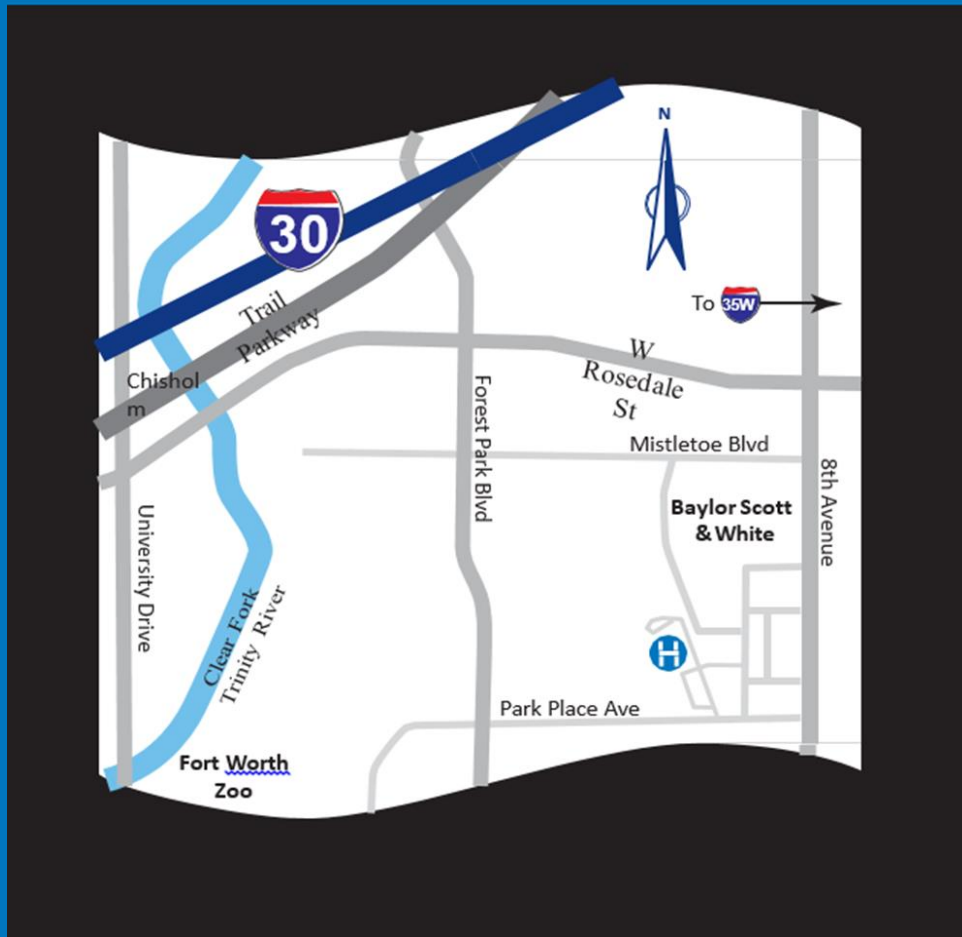
Thank you for choosing Baylor Scott & White Surgical Hospital Fort Worth for your spine procedure. Your success and satisfaction is of the utmost importance, if at any time you have unanswered questions please contact the facility (682-703-5600). Your successful recovery and improved quality of life is the goal of our team!

Sincerely,

Baylor Scott & White Surgical Hospital Fort Worth Care Team

Notes:

[illegible]



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