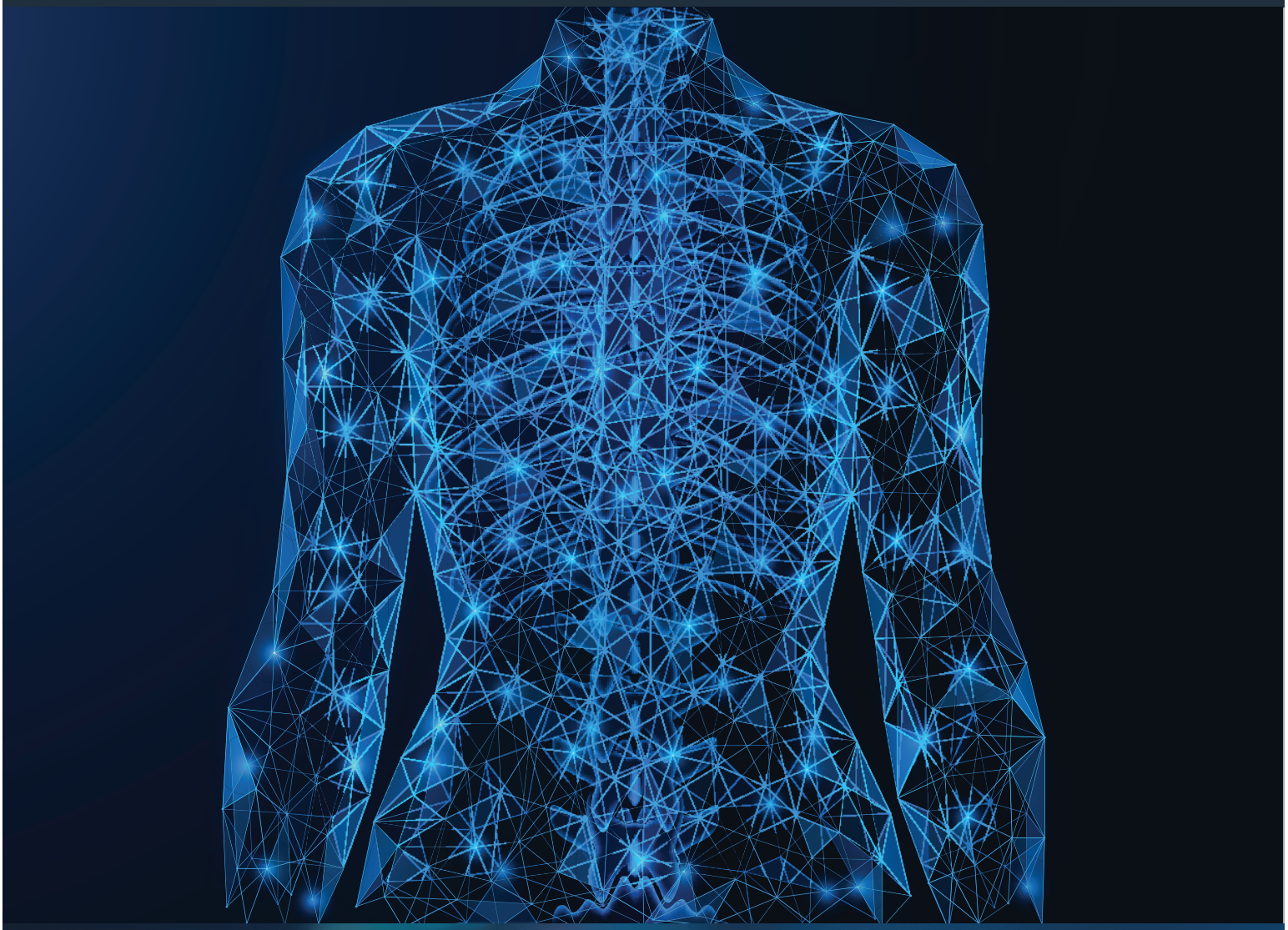
TGH Tampa General Hospital

USF Health
Morsani College of Medicine

An Education Guidebook for Patients Undergoing

SPINE SURGERY



PURPOSE OF THE GUIDEBOOK

As your spine surgery approaches, we want to provide you with important information to help you prepare. Our spine surgery education guidebook for patients is designed to empower you with comprehensive knowledge about your upcoming procedure. This guidebook serves two purposes: to give you essential information about what to expect before, during and after surgery, and to ease any concerns or uncertainties you may have by explaining surgical techniques, potential risks, postoperative care instructions and rehabilitation guidelines. By familiarizing yourself with this guidebook, you'll be better equipped to actively participate in your treatment journey, make informed decisions and ultimately contribute to achieving the best possible outcome.

We are honored that you have chosen us for your spine surgery. Here are some key points to consider:

- You are an excellent candidate for spine surgery if you have persistent pain despite trying other treatments, or if you're experiencing acute pain due to progressive neurological issues affecting your daily life.
- Our primary goal is to alleviate your pain, restore your independence and help you resume your normal activities.
- Our team comprises skilled professionals, including spinal neurosurgeons, spine patient care navigators, anesthesiologists, residents, advanced practice providers, nurses, therapists, pharmacists, dietitians and case managers. Together, we'll develop a personalized treatment plan tailored to your needs.
- You are a vital part of our team. Understanding your condition and what to expect from surgery is crucial. We encourage you to ask questions and learn as much as you can before, during and after your surgery.
- We are committed to providing excellent care and involving you in every step of the process to ensure the best possible experience and outcome.

If you have any concerns or questions, please do not hesitate to reach out. We are here to support you throughout your surgical journey.

With warmest regards,

Your Neurosurgical Team

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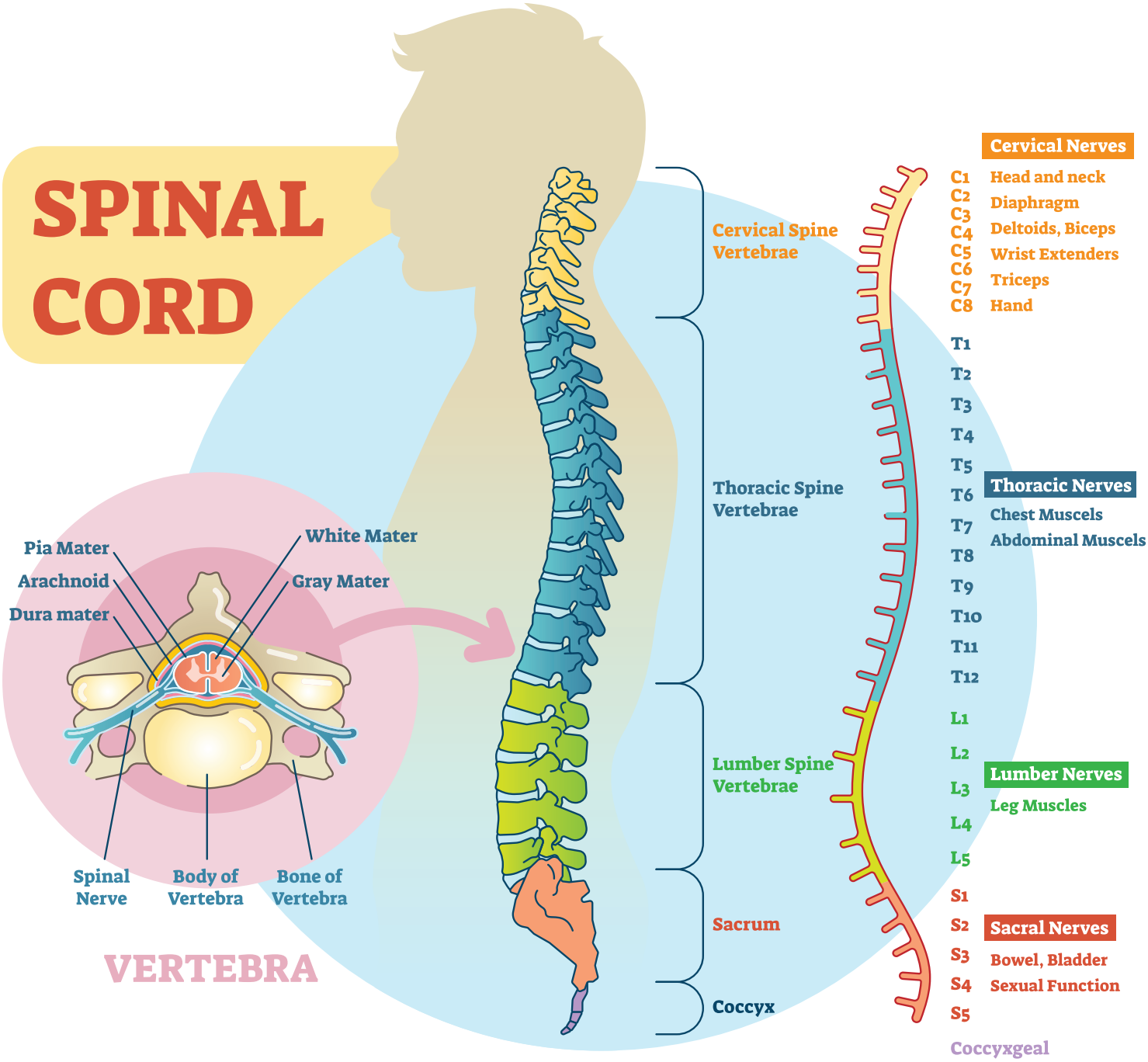
UNDERSTANDING THE SPINE

Although numerous spine conditions respond well to nonsurgical treatments, there are cases where surgery becomes necessary. If you and your surgeon have determined that surgery is the most suitable option for your condition, it's beneficial to familiarize yourself with your spine. These diagrams can aid in understanding the terminology your health care providers may use.



ANATOMY OF THE SPINE

Vertebral column

The vertebral column, also known as the spine or backbone, is a complex and essential structure that runs along the midline of the body. Composed of a series of individual bones called vertebrae, the vertebral column provides crucial support for the body, enabling upright posture, stability and mobility. It consists of five main regions: cervical, thoracic, lumbar, sacral and coccygeal, each with its unique characteristics and functions. The vertebral column also houses and protects the delicate spinal cord, which serves as the main pathway for transmitting sensory and motor signals between the brain and the rest of the body. Additionally, the vertebral column serves as attachment points for muscles, ligaments and tendons, contributing to overall movement and flexibility. Maintaining the health and alignment of the vertebral column is essential for optimal musculoskeletal function and overall well-being.

Cervical spine

The cervical spine, located in the neck region, plays a vital role in supporting the head and facilitating movement of the neck. Consisting of seven vertebrae labeled C1 to C7, the cervical spine is crucial for providing flexibility and stability to the upper body. These vertebrae are smaller and more mobile compared to those in the thoracic or lumbar spine, allowing for a wide range of motion such as bending, twisting and turning of the neck. Additionally, the cervical spine houses and protects the spinal cord, which transmits signals between the brain and the rest of the body. Given its essential functions, maintaining the health and proper alignment of the cervical spine is crucial for overall well-being and quality of life.

Thoracic spine

The thoracic spine, situated in the midback region, consists of 12 vertebrae labeled T1 to T12 and serves as a crucial component of the vertebral column. Characterized by its unique curvature, the thoracic spine provides structural support to the rib cage and protects vital organs, such as the heart and lungs. Each thoracic vertebra features articulating facets that connect with the ribs, contributing to the stability of the rib cage and facilitating respiratory movements. While the thoracic spine is relatively less mobile compared to other regions of the spine, it plays a vital role in maintaining posture, stability and overall body alignment. Additionally, the thoracic spine houses the spinal cord and nerve roots, facilitating the transmission of sensory and motor signals between the brain and the trunk. Overall, the thoracic spine's intricate structure and functions are essential for maintaining optimal musculoskeletal health and facilitating daily activities.

UNDERSTANDING THE SPINE

Lumbar spine

The lumbar spine, positioned in the lower back, comprises five large vertebrae labeled L1 to L5 and plays a pivotal role in supporting the upper body and facilitating various movements. As the largest and strongest section of the spine, the lumbar spine bears most of the body's weight and is highly susceptible to stress and injury. Its structure is optimized for stability, providing a solid foundation while allowing for limited flexibility, primarily in forward and backward bending motions. The lumbar spine also houses the lower segments of the spinal cord and nerve roots, making it essential for transmitting sensory and motor signals to and from the lower extremities. Maintaining the health and integrity of the lumbar spine is crucial for overall mobility, posture and quality of life.

Sacral spine

The sacral spine, located at the base of the vertebral column, consists of five fused vertebrae known as the sacrum. Positioned between the lumbar spine and the coccyx, the sacrum forms the back of the pelvis and serves as a crucial anchor point for the hips and lower extremities. While the sacrum is relatively immobile compared to other sections of the spine, it plays a vital role in supporting the weight of the upper body and transmitting forces between the spine and the pelvis. Additionally, the sacral spine contains openings called sacral foramina, through which spinal nerves pass to innervate various structures in the pelvis and lower limbs. Overall, the sacral spine contributes to stability, posture and locomotion, making it an integral component of the musculoskeletal system.

Vertebrae

The vertebrae are the small, individual bones that make up your spine. Think of them as building blocks stacked on top of each other, forming a flexible and supportive structure running down the center of your back. Each vertebra has a unique shape, with a round body at the front and various bony projections at the back. Together, these vertebrae create the spinal column, which protects your spinal cord — a bundle of nerves that carries messages between your brain and the rest of your body. The vertebrae play a crucial role in supporting your body's weight, allowing you to stand upright, bend forward and backward, and twist from side to side. They also help to absorb shock and protect the delicate spinal cord within. Understanding your vertebrae is important because they form the foundation of your spine and play a vital role in your overall health and mobility.

UNDERSTANDING THE SPINE

Intervertebral discs

Intervertebral discs are fibrocartilage cushions between the spine's vertebrae. They serve as shock absorbers, providing cushioning and flexibility to the spine while also maintaining space between the vertebrae. Each disc consists of a tough outer layer called the annulus fibrosus and a soft, gel-like inner core called the nucleus pulposus. These discs play a crucial role in supporting the weight of the body and allowing for movement in the spine. However, they can also be prone to degeneration or injury, leading to conditions such as disc herniation or degenerative disc disease. Proper care and maintenance of intervertebral discs are essential for overall spinal health and function.

Spinal muscles, tendons and ligaments

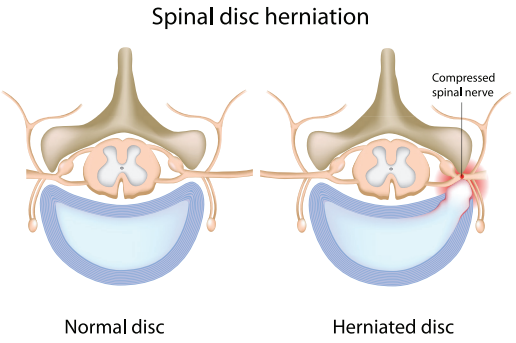
Spinal muscles, tendons and ligaments are essential components of the spinal column, working together to support and stabilize your back. Together, these structures form a complex network that supports the spine and allows for smooth, coordinated movement. Keeping your spinal muscles strong, tendons flexible and ligaments healthy through regular exercise, proper posture and ergonomic practices can help prevent back pain and maintain spinal health.

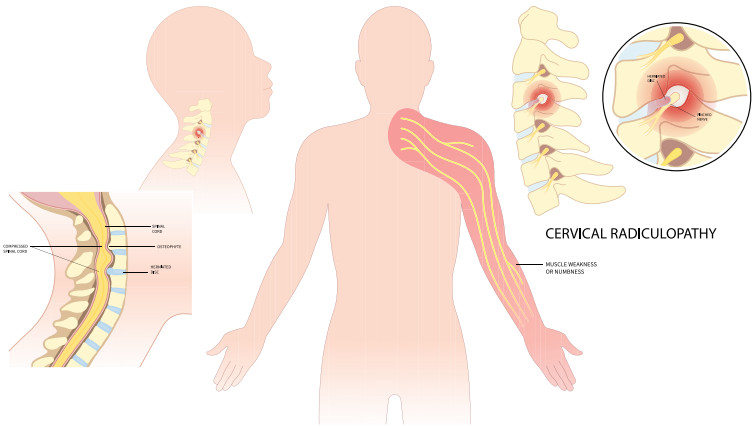
UNDERSTANDING THE SPINE

COMMON SPINAL DISORDERS

Herniated discs

A herniated disc, also known as a slipped or ruptured disc, is a common spinal disorder that occurs when the soft inner core of a disc protrudes through the tough outer layer. Your spinal discs act as cushions between the vertebrae, absorbing shock and allowing for movement in your spine. However, when a disc herniates, the inner gel-like substance can leak out and press against nearby nerves, causing pain, numbness or weakness in the area served by the affected nerve.





Radiculopathy

Radiculopathy is a condition characterized by pain, numbness, tingling or weakness that radiates along the path of a nerve, typically from the spine into the extremities. It occurs when a nerve root in the spine becomes compressed or irritated, often due to conditions such as herniated discs, spinal stenosis or degenerative disc disease. Radiculopathy can affect different parts of the body, depending on which nerve root is involved, leading to symptoms such as sciatica (pain radiating down the leg) or cervical radiculopathy (pain radiating down the arm).

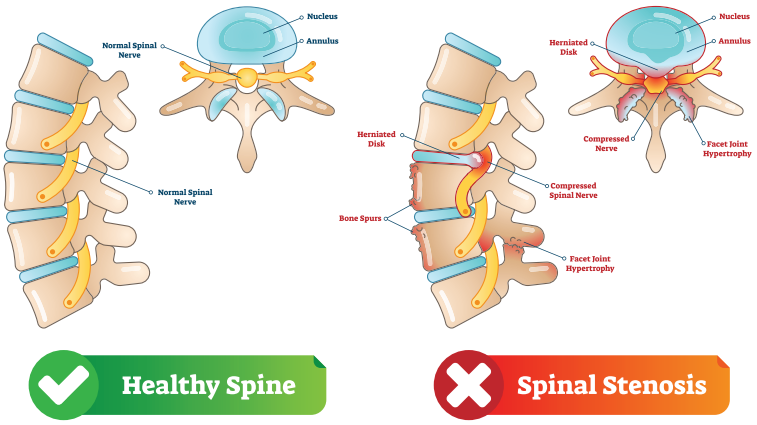
Spinal stenosis

Spinal stenosis is a condition that occurs when the spaces within your spine narrow, putting pressure on the spinal cord and nerves. Your spinal cord and nerves travel through openings in your spine called the spinal canal, which is surrounded by bones, discs and ligaments. When these structures become compressed or thickened, they can reduce the space available for the spinal cord and nerves, leading to symptoms.

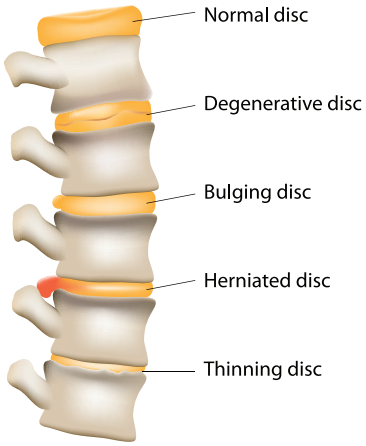
Symptoms of spinal stenosis vary depending on the location and severity of the narrowing but may include pain, numbness, tingling or weakness in the affected area. These symptoms may worsen with certain activities like walking or standing for long periods, as they can further compress the spinal cord and nerves.

UNDERSTANDING THE SPINE

Spinal stenosis can be caused by a variety of factors, including degenerative changes in the spine, such as bone spurs or thickened ligaments, herniated discs, or congenital conditions that affect the size of the spinal canal.



Treatment for spinal stenosis typically involves conservative measures such as physical therapy, medication and lifestyle modifications to manage symptoms and improve function. A pain management consult may be provided for epidural steroid injection, which can provide pain relief and reduction in inflammation. In more severe cases where symptoms are debilitating or progressive, surgery may be recommended to relieve pressure on the spinal cord and nerves. It's important to seek medical attention if you experience symptoms of spinal stenosis, as early intervention can help prevent further damage and improve outcomes. Your health care provider can evaluate your symptoms, perform diagnostic tests and develop a personalized treatment plan to address your specific needs and improve your quality of life.



Degenerative disc disease

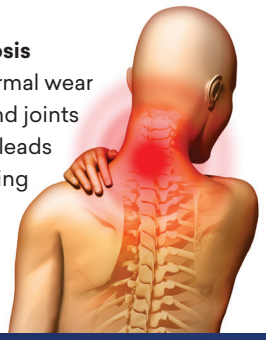
Degenerative disc disease (DDD) is a condition characterized by the gradual deterioration of the intervertebral discs in the spine. These discs act as cushions between the vertebrae, absorbing shock and allowing for movement in the spine. However, with age or due to other factors such as injury or repetitive stress, the discs can wear down, lose their flexibility and become less effective at cushioning the spine.

UNDERSTANDING THE SPINE

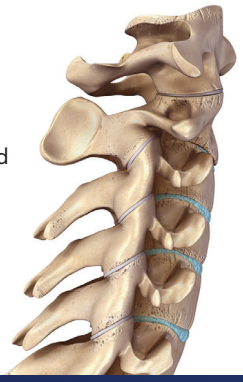
COMMON SPINAL DISORDERS

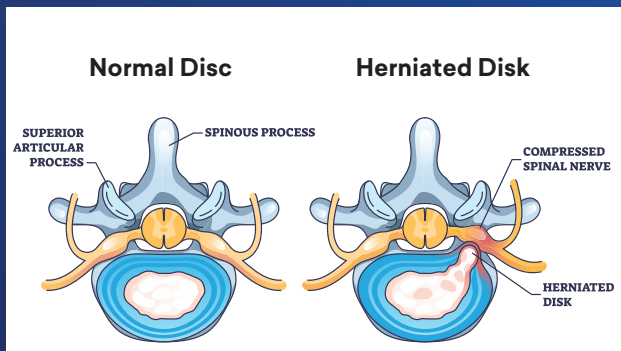
CERVICAL SPONDYLOSIS

Cervical Spondylosis is created by abnormal wear and tear of disks and joints of the neck, which leads to neck pain radiating up to both hands



Spondylosis is caused due to bone and muscle degeneration





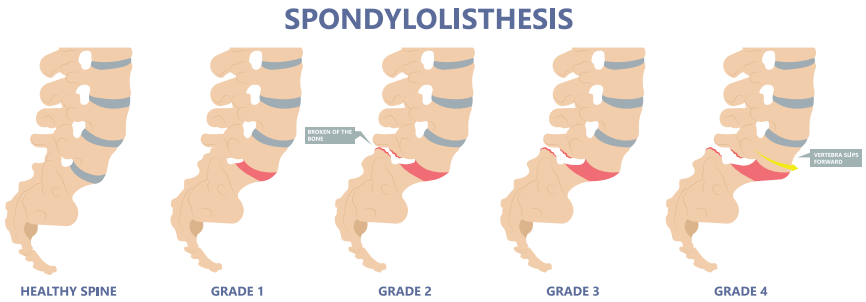
Spondylosis

Spondylosis, also known as spinal arthritis, is a common condition characterized by degenerative changes in the spine, including the formation of bone spurs, thickening of ligaments and breakdown of cartilage. These changes typically occur with age and can lead to symptoms such as stiffness, pain and decreased mobility in the affected area of the spine. While spondylosis is not usually associated with severe complications, it can sometimes lead to spinal stenosis, where the narrowing of the spinal canal puts pressure on the spinal cord and nerves, causing symptoms such as pain, numbness or weakness in the arms or legs.

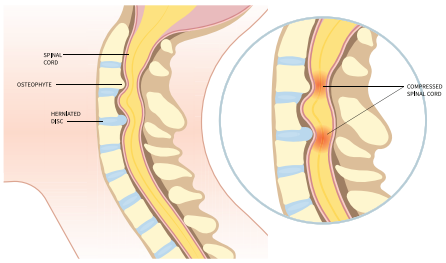
UNDERSTANDING THE SPINE

Spondylolisthesis

Spondylolisthesis is a condition where one of the vertebrae in the spine slips out of its normal position, typically forward over the vertebra below it. This can occur due to stress fractures, congenital defects or degenerative changes in the spine. Spondylolisthesis can lead to symptoms such as back pain, stiffness, and numbness or weakness in the legs.



CERVICAL MYELOPATHY



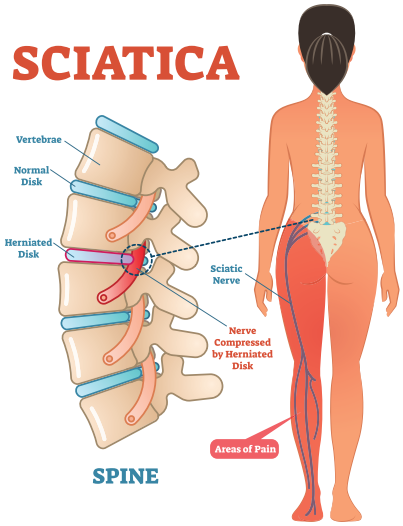
COMPRESSION OF THE SPINAL CORD IN THE NECK

Myelopathy

Myelopathy is a condition that affects the spinal cord, causing symptoms such as weakness, numbness, and difficulty with coordination or balance and walking. It occurs when the spinal cord becomes compressed or damaged, often due to conditions such as spinal stenosis, herniated discs or spinal cord injury. Myelopathy can lead to a variety of symptoms depending on the location and severity of the compression, including difficulty walking, problems with fine motor skills, and changes in bladder or bowel function.

Sciatica

Sciatica is a common condition characterized by pain that radiates along the sciatic nerve, which extends from the lower back down the back of each leg. It typically occurs when the sciatic nerve is compressed or irritated, often due to conditions such as a herniated disc, spinal stenosis or degenerative disc disease. Sciatica can cause symptoms such as sharp or shooting pain, tingling, numbness, or weakness in the buttock and leg. These symptoms may worsen with certain movements or activities that put pressure on the nerve, such as sitting or standing for long periods.



PREPARING FOR SURGERY

MEDICAL CLEARANCE FROM YOUR OTHER DOCTORS

As you prepare for your upcoming spinal surgery, it's important to understand the significance of attaining medical clearance from other doctors beforehand. This process involves consulting with specialists or your primary care physician to ensure that your overall health is optimized, and any pre-existing medical conditions are effectively managed before undergoing surgery.

Obtaining medical clearance is essential for your safety and the success of your procedure. During these consultations, your doctors will assess various aspects of your health, including cardiovascular function, respiratory health, diabetes control and medication management. By addressing any underlying health concerns and optimizing your condition, we can minimize the risk of complications during surgery and support a smoother recovery process.

Your health and well-being are our top priorities, and obtaining medical clearance from other doctors is a crucial step in ensuring the best possible outcome for your spinal surgery. We are committed to working closely with you and your health care team to address any concerns and provide personalized care every step of the way.

If you have any questions or concerns about the medical clearance process or your upcoming surgery, please contact us. We're here to support you throughout your journey to better health.

Pain management appointment (schedule post-op pain appointment prior to surgery)
Please schedule an appointment with your pain management doctor for approximately one week after your surgical date since proper pain control is crucial for a smooth recovery.

Primary care physician (PCP) (schedule PCP appointment prior to surgery)
Please schedule an appointment with your PCP for approximately one to two weeks after your surgical date to ensure that they have all the necessary records/information to provide the best possible ongoing care to meet your needs.

PREPARING FOR SURGERY

PRE-ADMISSION TESTING AND PRE-OP APPOINTMENT

Once your surgery is scheduled, a staff member from your surgeon's office will arrange appointments for you to visit the Pre-Admission Testing (PAT) department in addition to your scheduled pre-op appointment. These appointments typically take place within seven days before your surgery. During the PAT appointment, the staff will conduct an assessment and perform any necessary tests. They will compile your medical record in advance, making it available to the surgical team, including the anesthesiologist, to review before your surgery. Also, the PAT staff will provide instructions on eating, drinking and taking medication before your surgery. Chlorhexidine wipes, to be utilized on the day of surgery, will be provided along with teaching you how to use them.

Please bring to your PAT appointment a list of allergies as well as an up-to-date list of the medications you are on, including vitamins and supplements, so that your chart may be updated accordingly.

MEDICATIONS TO AVOID

Before spine surgery, it's important to be aware of certain medications that should be avoided as directed by your neurosurgeon. These medications can affect blood clotting and increase the risk of bleeding during and after surgery. Here are some common medications to avoid.

1. **Nonsteroidal anti-inflammatory drugs (NSAIDs):** Examples include ibuprofen (Advil, Motrin), naproxen (Aleve) and aspirin. These medications can thin the blood and increase the risk of bleeding during surgery.
2. **Anticoagulants and blood thinners:** These include medications like warfarin (Coumadin), clopidogrel (Plavix) and some newer oral anticoagulants (e.g., dabigatran, rivaroxaban). These drugs are specifically designed to prevent blood clotting and must be carefully managed before surgery to minimize bleeding risks. Clearance from Cardiology/Vascular providers is needed stop any medication prior to surgery.
3. **Herbal supplements:** Certain herbal supplements, such as ginkgo biloba, garlic and ginger, can have blood-thinning effects, like NSAIDs, and should be avoided before surgery.
4. **Vitamin E, fish oil, omega-3 fatty acids:** High doses of vitamin E can also have blood-thinning effects and should be avoided before surgery.
5. **Weight loss medicines:** Certain weight loss medicines can cause complications during the surgery.

It's crucial to follow your neurosurgeon's instructions regarding medication use before surgery closely. They may provide specific guidelines tailored to your individual health needs and the type of surgery you'll be undergoing. If you have any questions or concerns about which medications to avoid, don't hesitate to discuss them with your neurosurgeon or health care provider. Your safety and successful outcome are our top priorities, and proper medication management is an important aspect of your preoperative care.

PREPARING FOR SURGERY

SMOKING CESSATION

For individuals who smoke, quitting before spine surgery is crucial for optimal outcomes and healing. Smoking can significantly impair the body's ability to heal by reducing blood flow and oxygen delivery to tissues, which can lead to delayed wound healing, increased risk of infection and complications during surgery. Quitting smoking before surgery can improve circulation, lung function and overall health, reducing the risk of complications and enhancing recovery. It's an essential step to support the success of spine surgery and promote better long-term outcomes.

PREPARING YOUR HOME

Preparing your home after postoperative spinal surgery is crucial for your recovery and safety. Here are some important points to consider:

1. **Clear pathways:** Ensure that there are clear pathways throughout your home to prevent tripping hazards. Remove any rugs or obstacles that could impede your movement.
2. **Comfortable sleeping arrangements:** Arrange your sleeping area to be comfortable and supportive. Use extra pillows or a recliner if necessary to maintain a proper sleeping position recommended by your surgeon.
3. **Accessible items:** Place frequently used items within easy reach to avoid bending or reaching overhead. These include medication, water, remote controls and personal care items.
4. **Assistive devices:** If prescribed by your doctor, use assistive devices, such as a walker, cane or grab bars in the bathroom, to aid mobility and prevent falls.
5. **Avoid strenuous activities:** Refrain from lifting heavy objects or performing strenuous activities that could strain your back during the recovery period. Follow your surgeon's instructions regarding physical activity.
6. **Supportive furniture:** Use supportive furniture, such as chairs with armrests, to assist with sitting and standing. Avoid low sofas or chairs that may be difficult to get out of.
7. **Meal preparation:** Consider preparing and freezing meals that can be easily heated.
8. **Assistance:** Arrange for assistance from family members or caregivers, especially during the initial recovery period when mobility may be limited. Depending on the surgery's size, plan on about one week of assistance from family/friends in the house. If you have questions about how much assistance you may need, ask your surgeon.

By taking these steps to prepare your home and your life, you can create a safe and comfortable environment for your recovery after spinal surgery. Always consult with your health care provider for personalized advice based on your specific condition and surgery.

WHAT TO BRING TO THE HOSPITAL

- Driver's license or state-issued picture identification
- Health insurance card and any copay, if applicable
- Advance directive, living will and durable power of attorney
- Loose and comfortable clothing (for example, button-downs for patients having neck surgery)
- Current list of medications
- Current list of allergies
- CPAP machine with settings
- Personal items (toothbrush, toothpaste, dental cleaning solution, comb/brush and shaving kit)
- Eyeglasses, dentures, hearing aids, cell phone charger

Do not bring to the hospital

- Jewelry, money and other valuables. You will be responsible for your personal belongings.
- Medication, unless otherwise instructed by your health care team

PREPARING FOR SURGERY

THE NIGHT BEFORE SURGERY

The night before spinal surgery is an important time to prepare both mentally and physically. Here's what you should keep in mind:

1. **Follow preoperative instructions:** Follow any preoperative instructions provided by your surgeon or health care team. These may include not eating after midnight, showering with a special soap or avoiding certain medications.
2. **Pack your hospital bag:** Pack a bag with essential items for your hospital stay, including comfortable clothing, toiletries, any medications you're currently taking and items to help you stay occupied, such as books or electronic devices.
3. **Get plenty of rest:** Try to get a good night's sleep to ensure that you're well-rested before surgery. Relaxation techniques such as deep breathing or gentle stretching may help you unwind.
4. **Stay hydrated:** Drink plenty of water unless instructed otherwise by your health care provider. Proper hydration is important for your overall health and can help with recovery.
5. **Arrange transportation:** Plan for transportation to the hospital for your surgery. Ensure that you have a reliable method of getting to the hospital on time, whether it's a family member, friend or taxi service.
6. **Address anxiety:** It's normal to feel anxious before surgery. Talk to your health care provider if you're feeling particularly anxious or have concerns about the procedure. They can provide reassurance and support.
7. **Follow dietary guidelines:** Follow any dietary guidelines provided by your surgeon, such as avoiding heavy or spicy meals the night before surgery. Stick to light, easily digestible foods to minimize the risk of complications. You are likely to be "nothing by mouth" after midnight.
8. **Prepare your home:** Make any necessary arrangements at home, such as arranging for someone to take care of pets or plants during your hospital stay.

By following these steps, you can help ensure that you're well-prepared both mentally and physically for spinal surgery. Remember to trust in your health care team and the expertise of your surgeon as you embark on this journey toward improved health and well-being.

THE DAY OF SURGERY

1. Remove all jewelry and body piercings.
2. Arrive 2.5 hours prior to your scheduled surgery time.
3. Chlorhexidine gluconate (CHG baths) to be completed
4. Follow the anesthesiologist's or surgeon's instructions regarding the medications to be taken on the morning of surgery.

PARKING

Valet services are available Monday-Friday from 5 a.m. to 8 p.m. at the Main Entrance for $5. If you park in the garage, you may call (813) 844-2277 to request a courtesy shuttle. The shuttle will be dispatched to your vehicle and take you to the front door of the Main Entrance. Garage parking is $3 for the day and free for the first hour.

HOSPITAL ADMISSION AND REGISTRATION

Upon your arrival at the hospital, your first stop will be the registration desk, where you'll check in to begin your surgical journey. After completing the registration process, a crucial step follows: the placement of an identification (ID) bracelet on your wrist. This small but significant bracelet serves as a safeguard throughout your time at the hospital. Every staff member you encounter will carefully check your ID bracelet, ensuring that they have the correct patient information before administering any treatment or medication.

DAY OF SURGERY

MEETING THE SURGICAL TEAM

Moving forward, you'll transition to the preoperative area, where a dedicated surgical care team will guide you through the preparations for your upcoming surgery. Here, you'll be provided with a comfortable gown, a surgical cap to maintain sterility and cozy slippers to help you feel at ease. Additionally, intravenous (IV) fluids will be started to ensure your hydration and comfort leading up to the procedure. During this time, you'll have the opportunity to meet with both your surgeon and anesthesiologist, as well as other members of the team who will be following you closely throughout your stay, who will gladly address any questions or concerns you may have.

As part of our comprehensive safety protocols, you'll be actively engaged in the process of identifying your surgical site. This collaborative effort ensures that everyone involved is aligned and focused on performing the correct procedure at the precise location on your body. Your participation in this critical step further enhances the accuracy and precision of your surgical experience.

When the time comes, your attentive care team will accompany you to the operating room, guiding you with compassion and support every step of the way. For those who wish to have a companion present during your surgery, we offer a dedicated surgery waiting area. Here, your loved one can monitor your progress on a patient tracking board.

POSTOPERATIVE RECOVERY

IMMEDIATE POST-SURGERY CARE

After your surgery, you will be admitted to the Post Anesthesia Recovery Unit (PACU) for a short duration before being admitted to the Neuroscience unit in the hospital. As you wake up from anesthesia, you will be monitored and will receive pain medicine. Part of the normal recovery process is to be connected to several pieces of equipment, such as an oxygen mask, heart monitor, urinary catheter and pulse oximeter. Once you are awake and stable to be transferred to the Neuroscience unit, the care team will notify your family about your recovery and bed assignment.

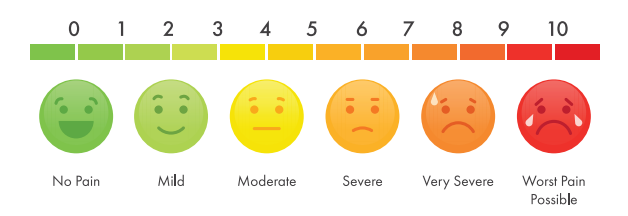
INPATIENT HOSPITAL STAY

Hospital visitation guidelines

Family members: Tampa General Hospital (TGH) wants to make your experience as comfortable as possible while you wait for your loved one. Please visit TGH.org/Patients-Visitors for local dining, points of interest and other resources.

PAIN MANAGEMENT STRATEGIES

By employing a combination of pain management strategies, your health care team aim is to promote comfort and facilitate recovery postoperatively.



1. **Pain management consults** will be placed at the surgeon's discretion and for all chronic pain patients who seek pain management currently.
2. **Oral medications:** We will use multimodal analgesia to control pain. Multimodal analgesia is using medications from a variety of classes to achieve improved pain control at lower doses. We will use opioids, GABAergic and muscle relaxers to achieve pain control.
3. **IV push medications** may be used for breakthrough pain, if needed.
4. Patient-controlled analgesia pumps, also known as PCA pumps, will be used after larger surgeries to achieve pain control. With PCA pumps, the patient pushes a button that releases IV pain medications at preset intervals as ordered by a provider.
5. **Alternative pain management:**
    a. Integrative therapy that uses pet therapy and music therapy, etc. to assist in pain control
    b. Recreational therapy offers various activities

POSTOPERATIVE RECOVERY

BOWEL REGIMEN

For patients undergoing spine surgery and taking narcotics for pain management, it is essential to follow a bowel regimen to prevent constipation, a common side effect of these medications. Your regimen should include:

1. **Hydration:** Drink plenty of fluids, particularly water, to help keep your stools soft.
2. **Diet:** Incorporate high-fiber foods, such as fruits, vegetables and whole grains, into your meals.
3. **Medications:** Use stool softeners and laxatives as prescribed by your doctor. Please do NOT decline these medications when offered by the nurse. Constipation postoperatively can increase pain and delay your discharge.
4. **Physical activity:** Engage in light physical activity as approved by your health care provider to stimulate bowel movements.

Adhering to this regimen will help maintain your digestive health and avoid complications during your recovery.

EARLY AMBULATION AND PHYSICAL AND OCCUPATIONAL THERAPY

At USF Health and TGH, our goal is for resumption of ambulation as soon as possible after surgery. Upon arrival at our Neuroscience unit, your preoperative ambulation status will be assessed by nursing. If you could ambulate prior to surgery, you will be asked to mobilize immediately post-op. If you were not ambulating independently, you will work with physical therapy the morning after surgery and will be expected at a minimum to get out of the bed and to the chair.

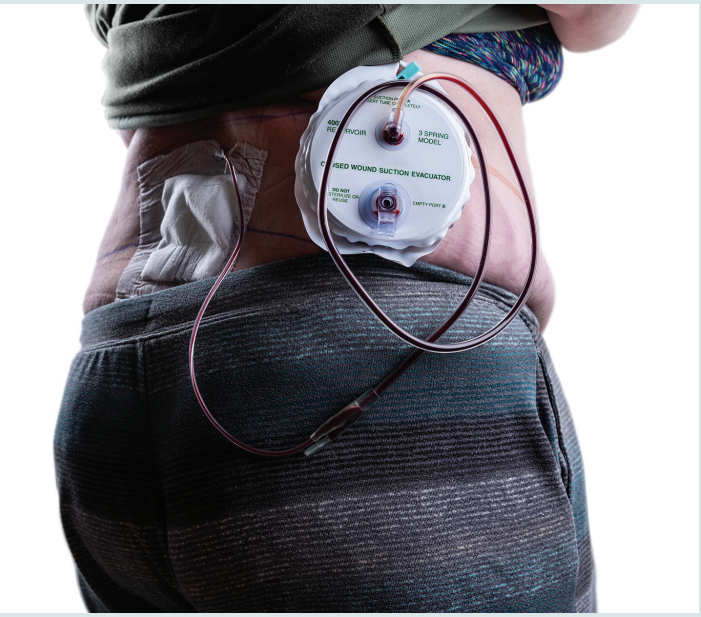
Early ambulation, or walking soon after spine surgery, is crucial for several reasons: First, it helps prevent complications, such as blood clots and pneumonia, by promoting circulation and respiratory function. Second, walking facilitates the recovery process by reducing stiffness, improving muscle strength and enhancing overall mobility. Early ambulation also aids in preventing postoperative complications, such as urinary retention and constipation, by stimulating bowel and bladder function. Additionally, walking promotes a sense of independence and psychological well-being, empowering patients to actively participate in their recovery. Overall, early ambulation plays a vital role in promoting optimal outcomes and a faster, smoother recovery after spine surgery.

POSTOPERATIVE RECOVERY

Physical therapy post spine surgery is essential for promoting recovery, restoring mobility and preventing complications. Through a tailored exercise program, physical therapists help patients regain strength, flexibility and function in the spine and surrounding muscles. Therapy sessions focus on improving posture, range of motion and stability, while reducing pain and inflammation. Additionally, physical therapists educate patients on proper body mechanics and ergonomics to prevent future injuries. The goal of postoperative physical therapy is to optimize functional outcomes, enhance quality of life and facilitate a safe return to daily activities. It plays a vital role in the comprehensive care of patients undergoing spine surgery, promoting long-term success and minimizing the risk of recurrence.

Occupational therapy post spine surgery focuses on helping patients regain independence in daily activities. Therapists assess functional abilities, develop personalized plans, and provide exercises to improve strength and flexibility. They also offer education on adaptive techniques and assistive devices to promote safe movement and prevent strain on the spine. Ultimately, occupational therapy aims to empower patients to resume normal activities and achieve a fulfilling lifestyle after surgery.

PREVENTING COMPLICATIONS



Drains

A drain is a medical device used to remove excess blood and fluid from a surgical site. It consists of a flexible tube connected to a reservoir. Visually, the reservoir may either be cylindrical (Hemovac drains) or bulb-like (JP drains). The drain is inserted near the surgical site and helps prevent swelling and infection by continuously removing fluid buildup. Health care providers periodically empty the reservoir and monitor drainage output. Once drainage decreases to an acceptable level, typically within a few days after surgery, the drain is removed. Overall, drains facilitate a smoother recovery process by promoting wound healing and reducing complications associated with fluid accumulation.

Chlorhexidine Bath

To help prevent hospital infections, you will receive chlorhexidine baths for three days after your surgery. Chlorhexidine is an antiseptic that reduces bacteria on your skin, significantly lowering the risk of surgical site infections. Our nursing care team will perform these baths while you are in the hospital as part of your post-operative care to ensure a better recovery.

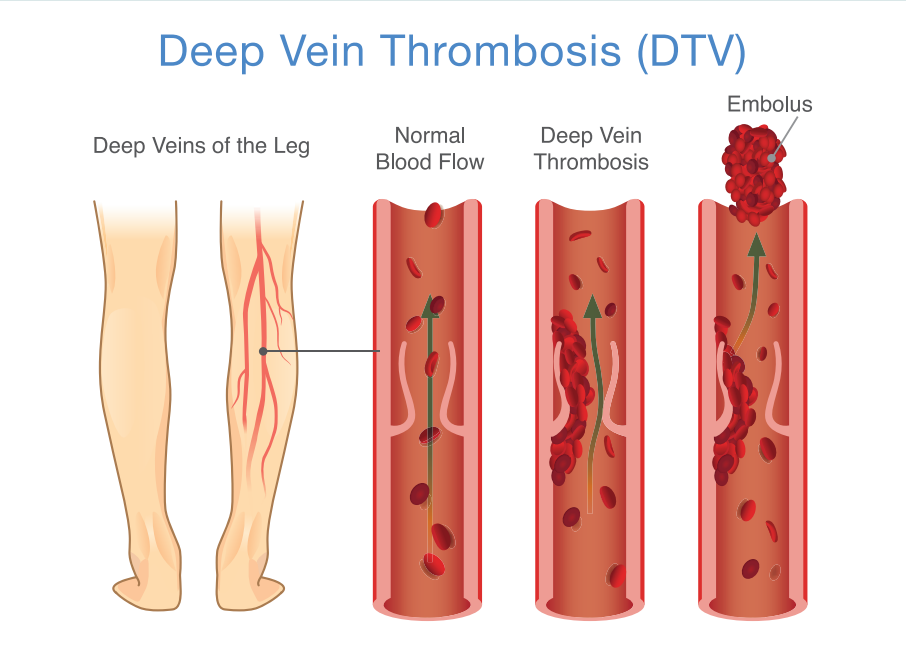
POSTOPERATIVE RECOVERY

Deep breathing exercises

An incentive spirometer is a medical device used in hospitals to help patients improve lung function through deep breathing exercises. It prevents respiratory complications after surgery, maintains lung function, promotes pulmonary rehabilitation, empowers patients in their recovery and allows health care providers to monitor progress effectively. Specifically, after spine surgery, when reduced mobility and pain can lead to shallow breathing, the incentive spirometer becomes even more critical. By encouraging deep breathing and lung expansion, it helps prevent complications, such as pneumonia or atelectasis, ensuring optimal respiratory function during the recovery process. Overall, it's a crucial tool for promoting respiratory health and facilitating patient recovery, especially after spine surgery.

Sequential compression device

Sequential compression devices (SCDs), are crucial tools in hospitals for preventing blood clots, particularly deep vein thrombosis (DVT), in patients recovering from spine surgery. By intermittently inflating and deflating cuffs around the legs, SCDs promote blood flow, reducing the risk of clot formation. Their use is vital post-surgery due to increased clotting risk from reduced mobility. SCDs complement other preventive measures, are noninvasive and contribute to overall cardiovascular health. In summary, SCDs play a critical role in preventing DVT and promoting patient well-being during the recovery period after spine surgery.



Sequential compression device

WEARING A BRACE

Following your spinal surgery, your health care provider may recommend a brace to support your spine muscles and limit excessive movement. It's essential to wear the brace as instructed by your provider. Here are some guidelines:

1. **Fit:** Your brace should fit snugly but not so tight that it causes discomfort, tingling or numbness.
2. **Clothing:** Wear a thin layer of clothing between your skin and the brace for added comfort.
3. **Symptoms:** If you experience pain, tingling or numbness while wearing the brace, stop using it immediately, and contact your surgeon for further guidance.
4. **Follow instructions:** Always adhere to your surgeon's instructions regarding the duration and usage of the brace.

Your brace plays a crucial role in supporting your spine during the recovery process, so it's important to use it correctly for optimal results.

POSTOPERATIVE RECOVERY

NEUROSURGERY DISCHARGE INSTRUCTIONS

Diet

- You may resume your regular diet.

Activity & restrictions

- Advance activity as tolerated
- No lifting above 10 pounds
- No driving while taking pain medications
- Walking as tolerated is encouraged.
- No bending, lifting, twisting (BLT)
- You may or may not have collar or brace instructions, depending on the surgeon's preference.

POSTOPERATIVE RECOVERY

Wound care

- Leave incision open to air; always keep it clean and dry.
- It is okay to shower and shampoo starting two to three days after surgery. No baths, swimming, soaking or hot tubs until after follow-up.
- Observe for signs of infection: increasing redness, tenderness, swelling or drainage.
- Wash hands prior to cleansing site
  - Cleanse incision site twice daily with mild soap and water and pat dry
  - Avoid touching the incision site as we can transfer bacteria with our hands.

Medication instructions

- Do not take any NSAIDs (e.g., Motrin, ibuprofen, Aleve, Advil, Mobic) until cleared by your physician.
- In place of your narcotic pain medication, you may take over-the-counter acetaminophen (Tylenol) per package instructions.
- Percocet, Norco, Fioricet and many other products contain Tylenol (acetaminophen). Do not take more than 4,000 mg of Tylenol (acetaminophen) in a 24-hour period from all sources combined.
- Over-the-counter stool softener or laxative (e.g., Colace, Miralax, Dulcolax) as needed. Ask your pharmacist to assist.

Follow-up instructions

- Follow up with APRN in the USF Health Neurosurgery clinic as scheduled for wound check in 10 -14 days
- Further follow-up to be discussed at your first postoperative appointment.
- For any surgical questions or concerns that may arise, call your doctor's office at (813) 821-8034.
- Call if you have a temperature over 100.5^0 F or drainage from the incision.
- Follow up with your primary care provider for medical management.

When to call 911

- Chest pain
- Shortness of breath
- A severe headache
- Trouble controlling your bowels or bladder
- Calf that is swollen, painful, warm to the touch and tender with pressure

TRANSITIONAL CARE CLINIC

COMMUNICATION WITH HEALTH CARE TEAM POST DISCHARGE

Inpatient Specialists Group (ISG) — Transitional Care Clinic

We understand that your journey toward recovery doesn't end when you leave the hospital. Our team is dedicated to ensuring a smooth transition from hospital to home, providing comprehensive care and support to help you achieve optimal health outcomes.

What is transitional care management?

Transitional care management is a service that helps coordinate and manage your health after you are released from the hospital. The service consists of a phone call from a member of the Inpatient Specialists Group (ISG) to you or your caregiver within two business days after you have been released.

ISG SERVICES

1. **24-48 hours: follow-up call**
   - We prioritize your well-being by conducting follow-up calls (on a weekday) within 24-48 hours of discharge. Doing so allows us to address any concerns or questions you may have and ensure a seamless transition from hospital to home.
2. **Medical reconciliation**
   - Our team will review your medications to ensure accuracy, prevent interactions and optimize your medication regimen for your specific needs.
3. **Entire care team communication**
   - We facilitate open communication between all members of your care team, including physicians, specialists, nurses and caregivers. Doing so ensures that everyone is informed and working together to support your recovery.
4. **Wound care, medication follow-up and other concerns**
   - If you have any wounds or require ongoing medical management, our clinic provides dedicated support and follow-up to promote healing and prevent complications.
   - You can expect an appointment within seven to 14 calendar days after hospitalization.

Inpatient Specialists Group — Transitional Care Clinic — Phone: (813) 992-0946

GRADUAL RESUMPTION OF NORMAL ACTIVITIES

Work

Returning to work after spine surgery is a gradual process that requires careful planning and consideration of individual needs and circumstances. Patients should prioritize their health and recovery, following their health care provider's recommendations and guidelines. It's essential to communicate with employers about any restrictions or accommodations needed during the transition back to work. Depending on the type of surgery and job requirements, patients may need to modify their work duties or schedule temporarily. It's crucial to listen to the body, take breaks as needed and gradually increase activity levels to avoid overexertion or setbacks. Patients should also continue with any recommended rehabilitation exercises or therapy to support their recovery and improve strength and flexibility. Overall, returning to work after spine surgery requires patience, communication and a proactive approach to ensure a successful transition back to the workplace.

Driving

Driving after spine surgery is a significant consideration that requires careful evaluation and adherence to medical advice. Patients should refrain from driving until they receive clearance from their health care provider, typically after the initial postoperative period. Factors such as pain levels, mobility restrictions and the type of surgery performed influence the timing of resuming driving. It's essential to follow any specific instructions provided by the surgeon regarding driving restrictions and gradually reintroduce driving once cleared. Patients should prioritize safety and comfort, ensuring that they can perform emergency maneuvers and sit comfortably for extended periods before returning to driving. Consulting with the health care team and adhering to recommended timelines will help ensure a safe and successful transition back to driving after spine surgery.

EXERCISE AND PHYSICAL ACTIVITY

Postoperative exercises and physical activity are crucial for your recovery following spine surgery. Here is a summary of recommended activities:

1. **Walking:** Start with short, frequent walks to improve circulation, reduce stiffness and promote healing. Gradually increase the duration and distance as tolerated.
2. **Stretching:** Gentle stretching exercises help maintain flexibility and prevent muscle tightness. Focus on the legs, hips and back, but avoid any movements that cause pain.
3. **Strengthening:** Engage in light strengthening exercises for your core and lower back muscles, as these support your spine. Follow the specific guidelines provided by your physical therapist.
4. **Avoiding strain:** Avoid heavy lifting, twisting and high-impact activities until your doctor approves them.

Always follow your health care provider's instructions and attend all physical therapy sessions to ensure a safe and effective recovery.

APPENDIX

HEALTH CARE PROVIDER PHONE NUMBERS

HEALTH CARE PROVIDER	NAME	PHONE NUMBER
USF Health South Neurosurgery Clinic		(813) 821-8034
ISG Transitional Care Clinic		(813) 992-0946

APPOINTMENT LIST

APPOINTMENT	DATE	TIME	LOCATION

NOTES

Tampa General Hospital | NEUROSCIENCE INSTITUTE

1 Tampa General Circle
Tampa Florida 33606
(813) 844-7000

TGH.org/Neuro

Form #201 7/31/2024