

# Saint Luke's Marion Bloch Neuroscience Institute

*Spine Patient Pre-Operative Class*



Saint Luke's™

# Goals for Spine Class

- Review pre-operative instructions
- Review post-operative instructions
- Review expectations for surgical experience
- Answer your questions!





**PREPARATION  
IS THE KEY**

# OPTIMIZING YOUR HEALTH PRIOR TO SURGERY

- **Please let our office know if you are seeing a specialized doctor**
  - **Cardiology, Pulmonology, Rheumatology, etc.**
  - You may be asked to see your primary care provider or a specialized provider prior to surgery for additional testing to ensure you're healthy to undergo anesthesia.
- **Stop Smoking-** this can lead to delayed wound healing after surgery.
- **Weight management-** maintain a healthy weight to reduce the risk for complications after surgery: blood clots, increased pain, increased risk for needing additional surgery.
- **Nutrition-** balanced diet, adequate protein, vitamin D and Calcium can help with bone health
- **Diabetics-** blood sugar control, A1c less than 7



# 1-2 Weeks Prior to Surgery

## Obtain Pre Operative Labs ordered by your surgeon

## Stop blood thinning products – 7 days prior to surgery

- Aspirin & aspirin products
- Plavix
- Non-steroidal anti-inflammatory medications
  - Examples: Advil, Aleve, Voltaren, Mobic
- Any herbal supplements
- Vitamins (Vitamin E, C, K, etc)
- Fish Oil

## Other blood thinning medications

- Eliquis, warfarin, Xarelto (may have different hold recommendations)

## Other medications:

- Steroids, immunosuppressive medications, GLP-1

# Surgery Time & Pre Op Bathing

- You will receive a confirmation call from your surgeon's nurse one week before surgery to discuss surgery check in time.
- Pre-Anesthesia Testing call – to review health history and medications
- 5 days prior to surgery- begin bathing with chlorhexidine/antibacterial soap, wash or change bedsheets

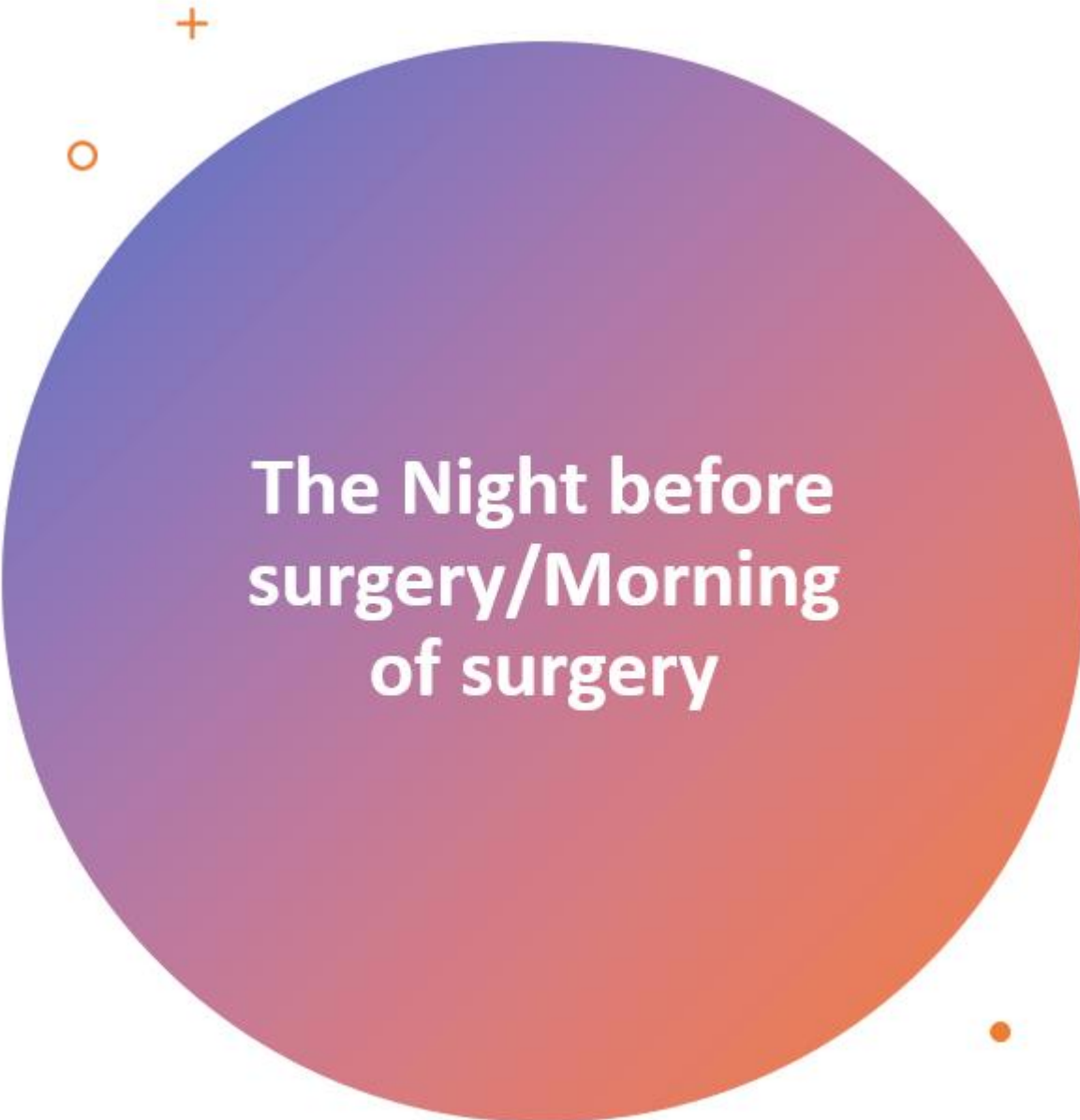
# What should I do to prepare for my Surgery?

- **TRANSPORTATION/HELP/SCHEDULE:**

- Arrange for a family member or friend to accompany you to the hospital the day of your surgery
- **Plan ahead** for transportation home the day of your planned discharge
- Arrange for someone to stay with you at least the first few nights once you return home
- **Start thinking about who will be helping you at home after surgery:**
  - Medication administration
  - Showering/getting dressed
  - Meals/grocery shopping
  - Household chores
  - Picking up meds/refills from the pharmacy

# What should I do to prepare for my Surgery?

- Remove small throw rugs or other small obstacles that may be in your path.
- If you have pets, you may want to arrange for someone to assist in caring for them for a few days after you return home.
- Hydration and fiber consumption can help with post op constipation- stock up on fiber, fruits/veggies, stool softener & laxative
- Adjust your work/social schedule accordingly during your anticipated recovery time- we complete short term disability/FMLA



## The Night before surgery/Morning of surgery

- The Night Before Surgery
  - Nothing to eat 8 hours prior to arrival time, clear liquids can be consumed up to 2 hours prior to arrival. Please drink a 16-ounce carbohydrate drink (Gatorade) 2 hours prior to arrival time.
  - Shower with chlorhexidine/antibacterial soap
  - Good night's sleep
- The Morning of Surgery
  - Shower with the Chlorhexidine soap
  - Brush your teeth, but do not chew gum, mints, or candy
  - Do not wear make-up, lotions, creams, perfumes, or powder; you may wear deodorant
  - Can have sips of water with approved medications (per anesthesia)

# What Do I Need to Bring with me the Day of Surgery?

- Photo ID and insurance card
- Updated med list if there have been any recent changes; Do not bring your home medications unless you have been instructed to do so.
- If staying in the hospital: Hearing aids, glasses, CPAP, walker, toiletries (deodorant, toothbrush, lotion)
- Dress appropriately
  - Loose-fitting pants, with an elastic waist band
  - Shoes with a non-skid sole, that you can easily put on
- Do not bring any valuables (money, jewelry, etc.)

# Day of Surgery

- Arrival: park in parking garage A- enter the hospital on the first floor and check in with admitting
- You will be directed to pre op from there (C level in the neuroscience institute)
- Pre op – labs, nasal swab, consent, meet with anesthesia and your surgeon
- Post Anesthesia Care unit (PACU) – You will recover in the PACU, we will closely monitor breathing, pain, and vitals
- If you are going home same day- you will have to meet criteria for discharge (stable vitals, pain controlled, walking, empty bladder)
  - Your surgeon will send pain meds to your preferred pharmacy
- If staying in the hospital- you will be transferred to a private room in the Neuro institute (Neuro 2)
  - Inpatient rooms only allow for one overnight visitor

# Post-Operative Physical Therapy

- **Outpatient surgeries:** you will likely start physical therapy after your initial follow up visit.
  - Use these slides as a guide for when you go home after surgery
- **Inpatient surgeries:** you will be evaluated by physical therapy and occupational therapy within 24 hours after your surgery.
  - Therapy sessions will consist of getting in/out of bed, standing, walking and going up/downstairs
- Friends and family are encouraged to attend your physical therapy session with you, as it is a great to have a motivated activity coach.
- **Early mobility is KEY!**

**Minimal mobility, such as continually lying in bed due to pain, causes deconditioning, which will prolong pain and your recovery!**

# Therapy in The Hospital



# What to Expect from Physical Therapy and Occupational Therapy

- **PT and OT will evaluate you following your surgery. They will assess the following:**
  - Home layout
  - Availability of caregivers
  - Barriers to a safe discharge to home
- **Physical Therapy:**
  - Getting in and out of bed
  - Sitting and standing from a chair
  - Walking
  - Stairs if appropriate
  - Potential need for assistive device
  - Getting in and out of a car
  - Balance
- **Occupational Therapy:**
  - Activities of daily living
  - Dressing, bathing, grooming, cooking, housework, toileting, etc.

# After Surgery

# Post-Operative: Day of Surgery

- Mobility will be initiated by either nursing team or Physical Therapy depending on timing of your surgery and arrival to the unit.
- Attempt activity with assist from staff or family member (if you are home) as able
  - Sit at the edge of the bed
  - Sit up in a chair
  - Walk in room or hallway as appropriate.
- Education regarding spinal precautions and log rolling

# Post-Operative Day 1 & 2

- Sit up in a chair for each meal with assist from staff
- Use restroom versus bedside commode as appropriate
- Walk within the room or in hallways with assist from staff
- Continued education regarding spinal precautions and log rolling
- **Physical Therapy**
  - will add to basic mobility that nursing staff provides
  - Practice stairs as appropriate
  - Determine need for assistive device (i.e. Rolling walker, Cane, etc)
- **Occupational Therapy consultation, as appropriate**
  - Determine need for assistive device (i.e. Reacher, shoe horn, sock aid, etc)

**\*\*If you are at home- ensure frequent ambulation/repositioning throughout your day. Get up and move every hour, aim for at least 30 minutes walking a day.\*\***

# Spinal Precautions



no bending  
no lifting  
no twisting

# Precautions

**Therapists will emphasize the mnemonic “No BLT”**

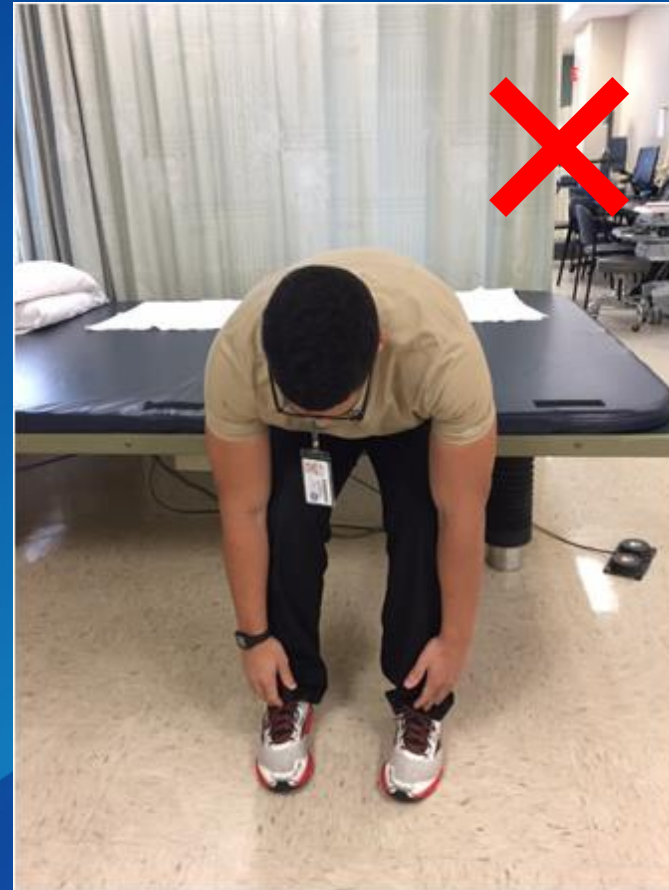
- Avoid repetitive **B**ending
- Avoid **L**ifting >10lbs unless otherwise instructed by surgeon
- Avoid **T**wisting at trunk, utilize log roll technique

# Bending

**Correct:** Rather, bring your foot to your body to put on your shoes and socks. This will avoid excessive bending.

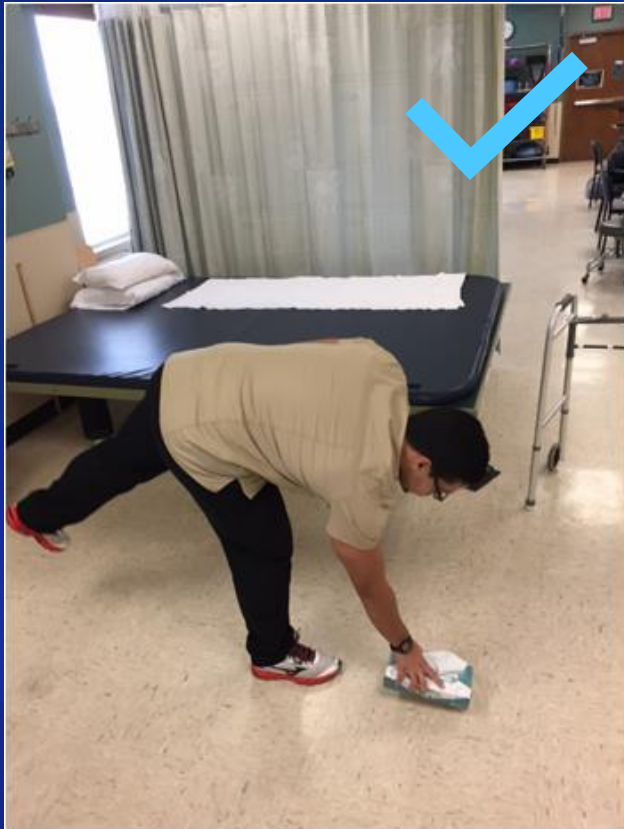


**Wrong:** Avoid full bending through the spine. Avoid a fully rounded out back to protect your surgery.



# Bending & Lifting

**Correct:** Kneeling or using the golfer's lift, is a better option for reaching down to the floor.



**Wrong:** Do not bend through the back if you need to lift something up off of the floor.



# Lifting



Do not lift anything greater than 10 pounds, until cleared by your surgeon

Approximate weights:

- 1 gallon of milk  $\approx$  8 pounds
- 12" stainless steel skillet  $\approx$  6 pounds
- 2 liter bottle of soda/water  $\approx$  4 pounds



Pack grocery bags light



Use a rolling bag or cart; ask for help with loading/unloading

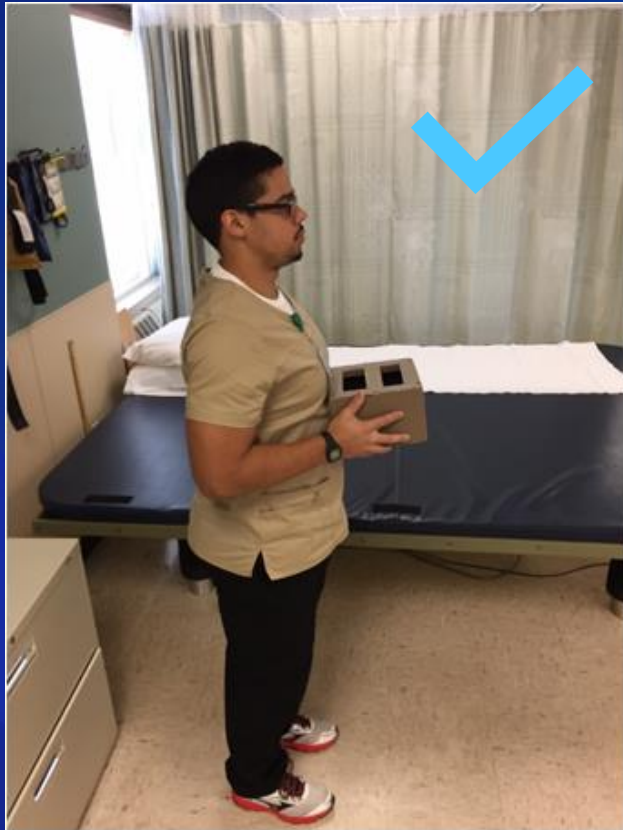


Do not lift overhead

Place frequent used items at arms reach prior to surgery.

# Lifting and Carrying

**Correct: Only carry light objects and always keep them close to your body.**



**Wrong: Avoid carrying objects that are held away from your body.**



# Twisting



- Move your feet instead of twisting at your waist
- Turn your hips and shoulders together
- Take short steps around turns
- Imagine rods connecting your shoulders and your hips so that your whole body turns together
  - Turn your whole body to look behind you
  - Log roll when getting out of bed
  - Turn full body when getting out of the car, rather than just swinging your legs out

# Getting out of Bed: Log Rolling

1. Bend both knees, keep feet flat on bed



2. Look in the direction you will roll and reach toward the edge of the bed



3. Slowly roll onto your side with shoulders, hips, knees moving at the same time



4. Bring legs off the side of the bed and push your torso up with your arms to come to sitting position at edge of bed



Avoid low beds if possible

# Getting In and Out of the Car

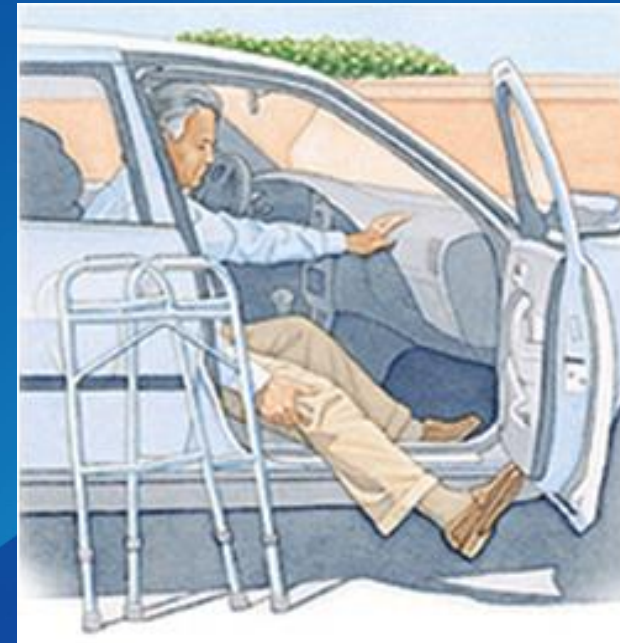
## Sit Down

- Back up to the car seat.
- Hold on to the side of the car or the dashboard for support.
- Lower yourself slowly onto the seat edge. Watch your head.



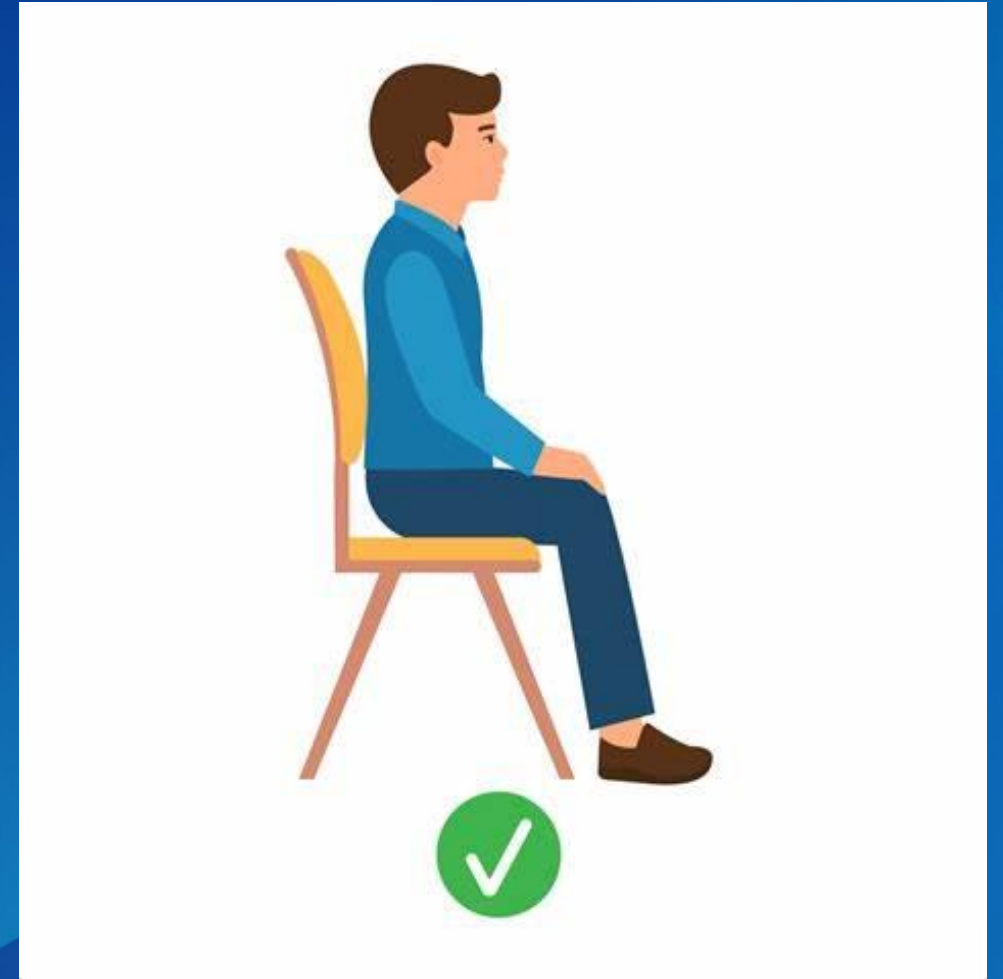
## Bring your legs into the car

- Slide back to the center of the seat.
- Lift your legs one at a time into the car.



# Proper Sitting

- Do not sit for longer than 30 minutes without changing positions
- Keep your feet flat. Don't cross your legs.
- Make sure your back and your legs are supported.
- Use a foot stool if needed.
- Support your arms.
- Avoid slouching or slumping.
- Avoid very soft or plush chairs and couches.



# Sitting Down



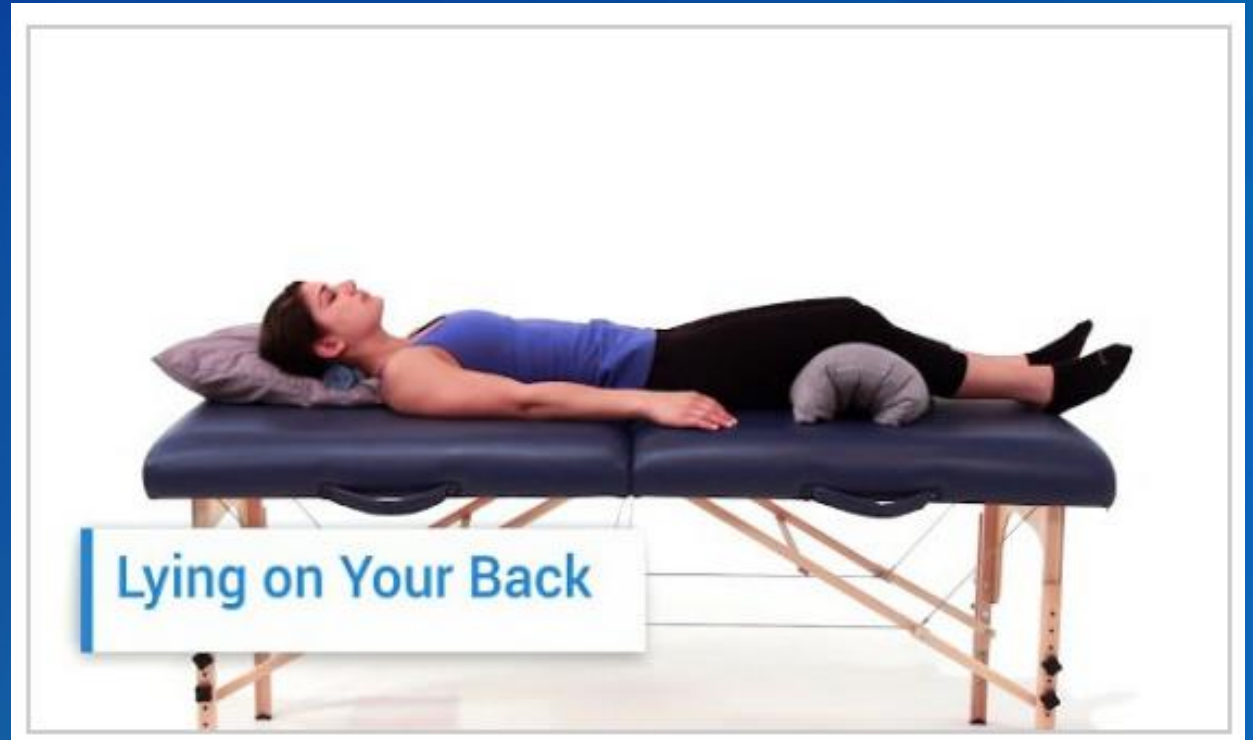
- Follow these steps to sit down. Reverse them to get back up.
- Make sure the chair is behind you.
- Place one foot slightly behind the other.
- Tighten your stomach muscles. Bend forward from the hips, keeping your back straight.
- Hold the armrests or sides of the seat for support.
- Bend your knees. Use your leg muscles to lower yourself onto the seat.
- Scoot back in the seat until you are comfortable.



# Sleeping Positions

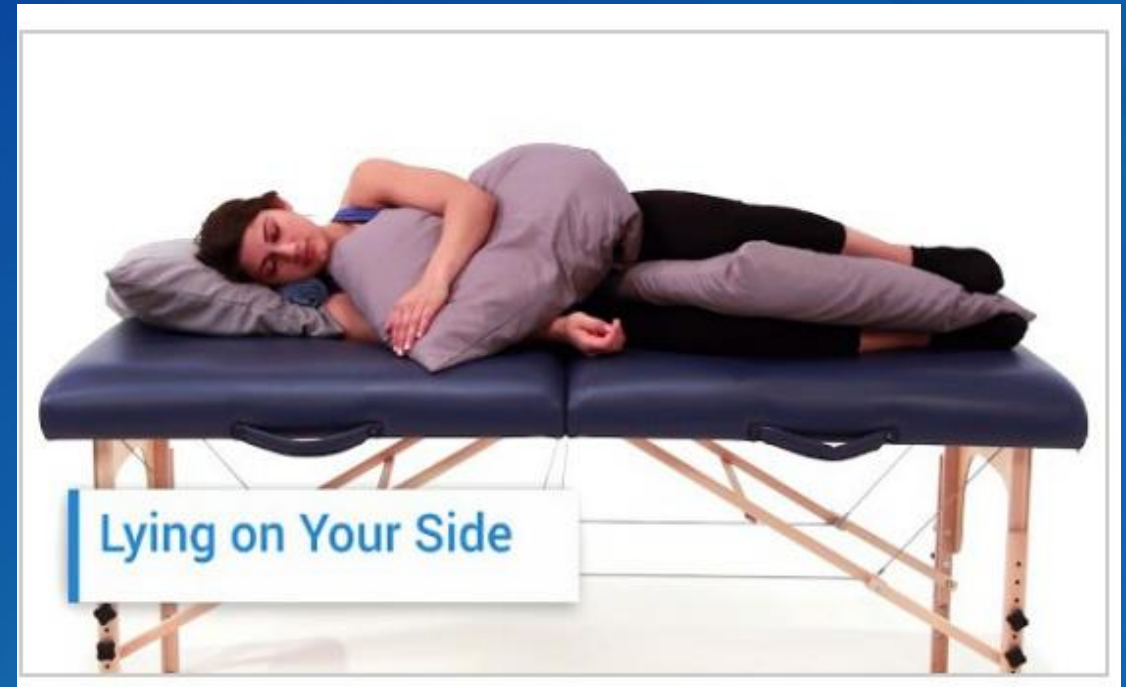
# On Your Back

- **Pillow for head**
- **Pillow(s) under knees to relieve pressure on your low back**



# Side-Lying

- **Pillow between your knees**
- **Pillow in front to hug/support arm**



# Goals & Expectations for Recovery



# Inpatient Care Pathways

- To help guide your recovery and facilitate a safe transition home from surgery, we have developed daily goals for each day you are in the hospital
- Achieving these goals is a team effort with you and your bedside team.
- **These goals consist of working with therapy/walking, ensuring optimal pulmonary function, bowel care, transitioning diet, and pain management**



# Goals after Surgery

**#1 goal: Early Ambulation-** we want all of our patients walking at least 30ft within 24 hours of surgery

- Get out of bed with each meal
- Reposition every hour, get up and walk around the unit or your home at least three times a day
- **Blood clot prevention (DVT)** –sequential compression devices on calves
- **Pulmonary function** –Incentive spirometer (breathing device) used 10x/hour while awake to prevent post op pneumonia
- **Bowel and bladder care** – chewing gum and bowel regimen (stool softener and laxative) for constipation prevention
  - Make sure you are emptying your bladder fully
- **Diet-** can eat regular diet after surgery, hydrate, we will have medication to help with any nausea
- **Drain (hemovac/JP) management-** monitor output, depending on your surgeon- you may discharge home with a drain
- **Pain management-**multimodal pain regimen, pain must be managed with oral medication prior to discharge

# PAIN MANAGEMENT

- Pain regimen consists of a narcotic (oxycodone, hydrocodone), muscle relaxant, Tylenol, and ice.
- Walking and repositioning will also help reduce your pain!
- Heat can be applied to radiating pain (never apply heat to the incision)
- The goal is that the pain regimen takes the edge off, we do not expect you to be completely pain free during your recovery period.
- Pain may increase post op day 2-3 as inflammation sets in, anesthesia wears off, etc.
- Pain regimen can be individualized to you and your post op recovery if needed.
  
- **Pain is expected post operatively:** surgical pain, leg pain, muscle spasms
- Prior to surgery radiating pain/sensation may fluctuate as you are healing
  - It is normal to feel similar and/or slightly different sensation, pain post op as those nerves are irritated and healing

# Inpatient Care Team

- During your inpatient stay, you will meet our team of advanced practice providers (physician assistants or nurse practitioners), residents, spine nurse navigator, nurses, nursing assistants, and therapists that will care for you.
- Your surgeon will always direct your care during your recovery. One of our advanced practice providers or residents will see and examine you each day that you are in the hospital and keep your surgeon updated on how you are progressing.
- Licensed social worker or care coordinator will work with you during your hospital stay to develop a plan for discharge and transition to home or another level of care
  - They will be able to answer questions about insurance coverage, medical equipment, and transportation
  - Any durable medical equipment (DME) that you may need will be arranged upon discharge from the hospital
  - **Some common DME that may be helpful during your recovery: shower chair, cane, walker, toilet lift, reacher and grabbers**

# Discharge Planning

## Steps to Discharge

- ✓ Pain is managed with oral medication
- ✓ No bowel/bladder concerns
- ✓ Tolerating regular diet/fluids
- ✓ Drain removed (if applicable)
- ✓ Walking frequently and safely
- ✓ Cleared by physical therapy / safe discharge plan determined

- Once you are medically ready for discharge, you may be discharged to one of the following:
  - **Home or self-care**
  - **Home with home health services**
  - **Acute care rehabilitation facility**
  - Skilled Nursing Facility (SNF)
- The next level of care will depend on several factors:
  - **Therapy recommendations**
  - **Insurance coverage**
  - Availability of service
  - Geographic preference

# Medication Management at Home

- Please take medication as prescribed and do not increase the frequency of the medication unless instructed by your physician.
- We will send pain medications to your desired pharmacy
- **Call our office for pain medication refills (we will prescribe pain medication up to 6 weeks after surgery)**
- If you were taking Aspirin, Coumadin, Plavix, Xarelto, or any other blood thinner or anti-platelet agent prior to surgery, please discuss the date in which you should restart the medication with your surgical team
- Fusion patients should avoid taking non-steroidal anti-inflammatory medications (NSAIDs) until cleared to do so by your surgeon (3-6 months)



# Additional Expectations for Recovery

- **You will have BLT restrictions for 12 weeks post op**
  - No bending, lifting, twisting, pulling, or pushing 10 pounds the first 6 weeks post op
  - No lifting >25 pounds from 6-12 weeks
  - Advance lifting restriction/activity per your surgeon's recommendations
- **Please be patient with your healing process, it takes time for your body to heal**
- No strenuous activity
- Walking and light activity is ok—at least 3 times a day
- Anterior cervical discectomy and fusion- may have some difficulties swallowing post op (soft foods =protein shakes, soup, smoothies)
- If you were given a brace in the hospital, you should continue to wear the brace when you are out of bed until cleared by your surgeon



# Outpatient Physical Therapy

- **We will refer you to outpatient physical therapy after your initial Neurosurgery follow up appointment.**
- Approximately 2-3 times per week for about 4-6 weeks
- Will require transportation if still taking narcotic
- This will need to be approved by your insurance
- Can send referral to any PT location

# WOUND CARE

- Remove outer bandage and shower post op day #3
- **If you go home with a drain**—do not shower until initial follow up appointment where your drain will be removed.
- No baths or swimming for 6 weeks after surgery
- Keep wound/incision clean & dry
- Allow soapy water to roll over incision with showers
- Do not rub the wound/incision; simply pat dry
- Do not apply any ointments or creams to the incision, unless instructed to do so by your surgical team
- There is no need to place additional bandage over incision



# WOUND CARE



**Steri Strips will fall off on their own with showers**



**Staples or sutures will need to be removed at 2 weeks post op**

# When to Call the Clinic

## IF you experience the following:

- **Signs of infection:** Fever above 101.5, Increased drainage of clear fluid or pus, redness, or swelling, warmth around the incision
- Pain not controlled by pain medication
- Sudden onset new weakness in extremities or bowel or bladder incontinence
- Confusion or disorientation



# Travel after Surgery

- **DO NOT** drive until you are no longer taking narcotic pain medication- you may need to plan for transportation to follow up appointments
- **Avoid** long car rides; if you have a road trip planned-stop and walk every hour
- It is ok to fly after surgery, as long as you maintain your restrictions of no bending, lifting, and twisting



## Follow- Up Appointments

**You will find scheduled follow up appointments in your discharge paperwork after surgery. Please call our office if you do not have a follow-up appointment scheduled.**

## Contacting our Clinic

**Business Hours 8:00AM-5:00PM Monday-Friday  
Neurosurgery Clinic: 816-932-2700  
Spine Nurse Navigator, Brooke: 816-932-2103**

**The patient portal is to be used for non-urgent needs.**

**After hours, weekends, & holidays we are still available: call our general clinic number (816-932-2700) & get connected with the surgeon/resident on call.**



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