Pre-operative Spine Education
Objectives for Today

- Understanding your procedure
- What to expect during the hospital stay
- Physical and Occupational therapy
- Pain management
- Discharge planning
- Caring for yourself at home
- Role of the caregiver

PLEASE NOTE: This is general information that applies to many different spine surgeries. Always follow the information/instructions provided by your Surgeon or Physician Assistant.
Preparing for Surgery

The Guidebook includes information about...

- Frequently Asked Questions (FAQs)
- Pre-op Process
- Hospital Stay
- Post-op Care
- Role of the Caregiver
- Caring for Yourself at Home
- Body Mechanics
Understanding the Procedure

Spine surgery may be recommended if non-surgical treatment such as medications and physical therapy fails to relieve symptoms.

*The goal of surgery is to lessen pain and restore function.*

Spine surgery is done to achieve one or more of the following: to take pressure off the nerve(s), realign the spine, or stabilize the spine.

The following procedures are done alone or in combination.

- Laminectomy
- Discectomy
- Fusion - instrumentation
- Bone Grafts
Terminology

- Bone Graft: donor bone or your own bone

- Fusion: creating a bridge between 2 or more vertebrae

- Hardware: titanium rods, plates, screws, or cages (spacer)
Procedures

Lamina:
- A thin plate or layer of bone

Laminectomy:
- Removal of a piece of the lamina to take pressure off the nerve

Before - bony overgrowth is putting pressure on the nerve

After - surgeon has removed bony overgrowth, relieving the pressure on the nerve
Procedures

Disc:
- Provides cushion between bony vertebrae
- Assists in mobility of spine
- Can bulge or rupture and cause pressure on the nerve

Discectomy:
- Removal of ruptured or bulging disc material
- Relieves pressure on the nerve
Procedures

**Fusion:**
- Fusion is a surgical technique in which one or more of the vertebrae of the spine are united together ("fused") so that motion no longer occurs between them.
- The vertebrae fuse over time as the bone grows together.
- Bone or bone growth substances are used to assist in bone growth.
- In the meantime, metal constructs keep the spine stable and aligned.
- Surgeons use many approaches (front, side, back).
- Approach is determined by location of problem.
Procedures

Bone Graft

Instrumented Fusion

Bone graft – Cadaver allograft or bone harvested from patient’s hip
Procedures

Lumbar

Cervical
Medical Clearance

- Appointment with your primary care doctor
- Instructions to stop or change any medications
- Lab work
- EKG, Chest X-ray
- Type and Screen for blood products if appropriate
- Additional Consults
Phone Calls from Pre-Admission Team

- Insurance
- Health History
- Medication History
- Advance Directives
- Any preparation:
  - Antimicrobial baths
  - Medications
  - Over the counter supplements
Evening Before Surgery

- The Pre-Admission Testing office will call you with instructions in the afternoon the day before surgery (or the Friday before if your surgery is on a Monday)
- Medication Review
- Follow instructions on:
  - When to stop eating and drinking
  - Medications to take/stop
  - When to arrive, where to park and enter building
Day of Surgery

- Report to Prep-op/Recovery area
- Check in at the Surgery desk
- 1-2 people may accompany you to the pre-op room where you will be prepared for surgery
- Surgeon will speak with a person you designate once surgery is completed
Pre-operative

- Hospital gown
- Start your IV(s)
- Review Health History and Medications
- Additional lab work as needed
- Antibiotic
- Site marking
- Infection prevention—cleanse skin, clip hair
- Meet the team
- General Anesthesia
  - IV Sedation
  - Mild Sore Throat
  - Discuss Pain Management Concerns
Operating Room

- People in room
  - RNs
  - Surgeon, Assistant
  - Anesthesia
  - Radiology
  - Neuro Monitoring

- You will fall asleep on cart
- Staff will transfer and position you on surgical table
- Wake up in your hospital bed
Recovery Room…PACU

- 1-2 Hour Stay
- Stabilize Vital Signs
- Neuromuscular Assessment
- Pain and symptom management
- Comfort Measures
- Cold therapy
- Brace or Collar in place – as prescribed by surgeon
Preventing Post-op Complications

Your surgeon and the hospital staff will do everything they can to prevent complications, but you play an important role…

- **Blood Clots**
  - Sequential Compression Device
  - Walking
  - Compression Stockings (per MD order)
  - Ankle Pump Exercises

- **Pneumonia**
  - Incentive Spirometer
  - Coughing & Deep Breathing
  - Walking
Preventing Complications

- **Nausea and Vomiting**
  - Medications
  - Advancing Diet

- **Infection**
  - Vital Signs
  - Inspect Incision
  - Review lab work
  - Antibiotics

- **Abdominal Distention**
  - IV Fluids
  - Walking
  - Stool Softeners
Pain Scale

- 0  No Pain
- 1-3  Mild Pain
- 4-7  Moderate Pain
- 8-10  Severe Pain

It is important to control your pain so you are comfortable, can move and participate in therapy, and can heal.
Remember…

- Goals of pain management:
  - Manage the pain so that you can eat, sleep and move around
  - Be able to actively participate in your recovery

- “Nerve pain” can persist immediately after surgery or be slightly worse due to manipulation of the nerve during surgery
Patient Controlled Analgesia
“PCA”

You may have a PCA or your nurse may administer your IV pain medications.

- Intermittent doses of medication delivered into your IV
- Patient controls administration
- Machine is programmed to allow administration of medication only at prescribed intervals.
- Push the button when you need it.
- Additional medications may be available if pain persists
The Next Day…

- Transition to Oral Pain Medication
- Variety of medications used
  - Narcotics, anti-inflammatory, anti-spasm drugs
  - May be given on a schedule and/or as needed
- Available approximately every 4 hours
- Constipation
  - Common side effect of narcotics
  - Minimize with medication, activity, fluids
Types of Pain

**Incisional**
- Soreness, Pressure
- Treat with pain medications

**Muscle Spasm**
- Tight, grabbing sensation
- Treat with muscle relaxant

**Nerve Pain**
- Numbness and tingling
- Shooting, burning pain
- Treat with medications
Additional Comfort Measures

- Cold therapy
  - Polar Care
  - Ice packs
- Positioning
- Sometimes heat at area of spasm only – not on incision
Managing Pain is a Partnership

We will do all we can to ensure your comfort and safety, but we need your help:

- **Intercept** the pain; ask for medication when the pain **starts** to increase – do not wait
- **Take** your pain medication on a regular basis
- **Tell** the nurse if the medication is not effective
- **Ask** questions; be sure you understand the pain management efforts that are in place
Spine Care Unit

- Patient-directed visiting
- Staff knowledgeable in care of spine patients
- Healing environment
- Education folder to guide you through your stay
Coaches are Important

A “coach” is a family member or friend who can help you during your hospital stay by…

- Providing comfort & motivation
- Observing therapy sessions
- Helping you gain confidence
- Listening to information about how to care for yourself
- Preparing for transition home
Day of Surgery

What to expect:

- Sleepy, but awake
- Progression of diet (Room Service)
- Possible catheter for urine (removed as soon as possible)
- Dressing, wound drain
- Pain Management

Activity:

- Turn side to side
- Sit on side of bed
- Out of bed to chair
- Walk to bathroom
Physical Therapy

*Usually begins the day of surgery*

Then, *twice a day*

- Getting in/out of bed
- Getting in/out of a chair
- Walking distances
- Stairs
- Car Transfers
Spine Precautions—No BLT

Usually for Spinal Fusion Surgery

NO Bending

NO Lifting

NO Twisting
Occupational Therapy

Usually one visit during your hospital stay.

- Bathing
- Dressing
- Hygiene

Adaptive Devices
- If needed
Post-op Braces

Need for brace is determined by your surgeon based on the surgical procedure.

- The brace helps protect the fusion by limiting your ability to move
- Follow your surgeon’s instructions regarding when you should wear your brace
Once You are Home...

- For the weeks follow surgery, the focus will be on walking

Your surgeon *may* recommend Outpatient Therapy:
- Core stabilization
- Typically begins 4-6 weeks post-op
Preparing your Home

Think about what you will need after surgery and prepare your home before surgery…

- Chair with arm rests
- Recliner chairs OK
- Special bed not necessary
- Remove throw rugs
- Stock up on pre-made meals
- Arrange for someone to care for pets
- Rearrange closets, dressers, kitchen, bathroom so that most frequently used items are within easy reach
What to Bring to the Hospital

- Loose-fitting clothes (shorts, T-shirts)
- MRI (films or CD) if not done at Elmhurst
- Any shoe/leg orthotics or walker you currently use
- Your back or neck brace (if given to you before surgery)
- ID bracelet
- Copy of Advance Directives

*Please leave valuables, cash and medications at home*
Transition to Home

Making the discharge plan:
With input of:

- Patient
- Family
- Surgeon
- Primary Nurse
- Physical Therapist
- Case Management

Please check:
- I am able to eat and drink small amounts.
- My oral pain medication offers relief.
- My vital signs are normal.
- I can get out of bed and walk.
- A caregiver is able to be with me at home.
- Transportation has been arranged.
Transition to Home

Discharge planning options:

- Home
- Home with Home Health
- Sub-acute Rehab Facility

- Equipment that may be needed

- *Insurance plans and authorizations*
Role of the Caregiver or “Coach” after Discharge

- Assist with mobility
- Evaluate incision
- Dressing changes
- Observe patient
- Assist with shopping and errands
- Transportation to follow-up appointments
Dressing Change Procedure

- Various dressings
- Specific care instructions provided at discharge
- Notify doctor of:
  - Fever
  - Redness
  - Drainage
  - Odor of incision/drainage
  - Increased pain at incision
Caring for Yourself at Home

- Change position hourly
- Wear your brace as instructed
- Fusion patients - apply spine precautions to all activities
- Walk daily and steadily; increase your distance
- Limit stair use to 2x day for the first week at home
The Road to Recovery…

- Pick one day each week to measure progress…write it down!
- Resist the urge to hurry back to your usual activities
- Protect your investment - follow your surgeon’s instructions and spine precautions to promote optimum healing

DO NOT SMOKE
Medications

- Take pain medication regularly exactly as prescribed
- Speak to your surgeon about when to decrease or discontinue pain meds
- Take stool softeners
- **Avoid** Motrin, Advil, Aspirin-type meds for 3 months *if you have had a fusion*
Discharge to Home

- Front seat of your own vehicle
- Tip for easy in/out: use a plastic garbage bag on the seat
- Stop along the way if your ride is more than 2 hours or you become uncomfortable
Good Luck with Your Surgery!

Thank you for coming!