RISKS OF LUMBAR SURGERY

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Medicine (and surgery) can be an inexact science. Although we plan and carry out our surgery as carefully as we can, the results can vary. With that in mind, you should have a clear understanding of possible risks of lumbar surgery including, but not limited to:

INFECTION

Anytime the skin is cut with a knife there is risk of infection. The risk of infection for posterior lumbar surgery is less than 1 percent if no hardware is being used and about 3 percent if hardware is implanted in the spine. Patients with diabetes and immunologic disorders are at a slightly higher risk of infection. Patients will get antibiotics before the incision is made and for 24 hours after the operation. If the patient gets an infection, he or she will need at least one additional surgery to wash out the wound and will be placed on IV for approximately 6 weeks.

BLEEDING

The amount of blood loss depends on the extent of lumbar surgery. More blood loss is to be expected when instrumentation is used and when more levels are involved. There are major vascular structures in front of spine. It is possible, but unlikely, to injure a large vessel which can cause significant bleeding and may in rare occasions warrant flipping the patient to the supine position and opening the abdomen by a vascular surgeon to control the bleeding. If there is extensive blood loss this also puts stress on the heart and puts the patient at risk of having a heart attack.

NEUROLOGIC INJURY

The spinal cord ends around L1. Surgery commonly involves levels below L1. However, if the surgery includes this level, there is risk of damaging the spinal cord. There is risk of damaging the nerves which can lead to more pain and disability.

DURAL TEAR

The nerve sack contains nerves and cerebrospinal fluid. The sack can be injured (dural tear) and a repair may be needed. If this occurs, the patient may have to remain flat in bed for 24 to 48 hours after surgery.

NO FUNCTIONAL IMPROVEMENT

In general terms, lumbar surgery is very predictable for relief of buttock and leg pain coming from the spine. Surgery is NOT predictable for relief of back pain. If the nerves have been squeezed for a long time, it often takes longer for them to recover. In some cases they do not recover fully and it is possible for symptoms to persist after surgery. Clinical improvement can continue for 1 to 1.5 years after surgery.

FAILURE OF FUSION

Also called non-union or pseudarthrosis. Failure of the fusion occurs about 10 to 20 percent of the time in the lumbar spine when instrumentation is used and approximately 30 to 40 percent without instrumentation. However, studies have shown that not achieving a fusion does not significantly change the clinical outcome compared to those patients who had confirmed bony healing on X-rays. Final healing of the fusion is not determined until several months after the operation. If the fusion does not heal and the patient is not happy with his or her symptoms the patient may choose to undergo further surgery. If the fusion does not heal but the patient can tolerate his or her symptoms then there is an option to follow things with serial X-rays.

OTHER

Risk of anesthesia: medical complications including stroke, heart attack or even death.

I HAVE READ AND UNDERSTAND THE ABOVE MATERIAL AND WISH TO PROCEED WITH THE OPERATION OFFERED BY FRANK N. GRISAFI, M.D.

_____

Signature of Patient Date

_____

Signature of Surgeon/Medical Staff Date

Preparing for spine surgery

This packet is designed to be a resource to help guide you through the spine surgery process. Please review the information before surgery, take the packet with you to the hospital and use it as a resource when you get home.

PREPARING YOUR HOME

Before coming to the hospital, you can do some things to prepare for an easier recovery. Such as:

- Place the telephone in a convenient area near the bed or chair
- Prepare food or purchase easy-to-prepare foods before you come to the hospital
- Identify a person who will be able to help you with shopping and other chores
- Move items frequently used in the kitchen and bath to places easily reached
- Place clothing, shoes and toiletries where they can be reached without bending
- Remove or secure any throw rugs so you won't trip over them
- Think about changes you would need to make if you need to stay on 1 floor level of your home

BLOOD DONATION

Because blood loss is possible during surgery, some patients donate blood prior to surgery to ensure they receive their own blood during surgery. To schedule an appointment for blood donation, call the Central Blood Bank at 1-800-310-9552. The blood bank will direct you to the blood draw location nearest to you. You will need to take a prescription provided by our office with you to the donation site. If you have managed care insurance that requires authorization, remember to contact your primary doctor or HMO center (if applicable) prior to donating blood for surgery.

MEDICAL CLEARANCE

Medical clearance lets your surgeon know that you are in good general health and that there are no known medical risks that may affect the outcome of your surgery. Your primary care physician can provide the appropriate medical clearance. If you are treated by a cardiologist or another specialist, you may need clearance from that physician as well.

Although no procedure is risk-free, the primary care physician is trained to recognize the details of your medical history and physical that may present special problems during and directly after surgery. This evaluation generally consists of a full history and physical exam, an electrocardiogram and chest X-ray and screening labs. Final consideration for surgery will be determined by the results of this exam.

PLEASE NOTIFY OUR OFFICE IMMEDIATELY SHOULD YOU DEVELOP FEVER, COUGH, FLU-LIKE SYMPTOMS OR ANY ILLNESS BETWEEN NOW AND YOUR SCHEDULED SURGERY.

MEDICATIONS

Seven days before your surgery, please discontinue any products containing aspirin or any anti-inflammatory drugs. This includes most arthritis medications. Please discontinue extra Vitamin E other than what it is in your daily vitamin. Please discontinue mineral and herbal supplements before surgery. You may take pain medications or Tylenol® as a substitute.

SMOKING AND TOBACCO USE

If you smoke, it is important to stop before your surgery. Absolutely **NO** smoking the morning of surgery. Ideally, you will have a better outcome from surgery if you don't smoke 1 to 2 weeks before and 6 weeks after surgery. Studies have shown that smoking interferes with the bone healing process. Nicotine interferes with the absorption of calcium into the bone. This applies to all tobacco products.

LETTERS FOR WORK LEAVE, FMLA AND DISABILITY

Should you require completion of short-term disability or FMLA forms, please submit your request to the front desk **at least 2 weeks** in advance. All requests, including the completion of insurance forms and disability forms are handled by the forms department. There is a $10 processing fee for each form submitted. Please allow 7 to 10 business days for completion of forms.

WHAT TO BRING TO THE HOSPITAL

It is preferable to wear the gowns provided by the hospital. This makes working with your IVs and incision much easier. You may want to pack underwear, shorts, loose-fitting pajamas or gowns if your stay will be more than 2 days. The comfortable clothes you wore to the hospital can be worn home.

Other items to bring:

- Short robe that opens in the front
- Non-skid slippers or soft, low-heeled shoes with closed backs, such as sneakers or loafers
- Personal toiletries
- No valuables please
- If you already have a cane or a walker, please bring with you to the hospital labeled with your name

DAY OF ADMISSION

Before you leave home to go to the hospital:

- You may be instructed by the internist or anesthesiologist to take some routine medication the morning of the surgery with a sip of water.
- Shower and wash your hair. If you were given a special soap to use, please use it the night before and the morning of surgery.
- You may brush your teeth and/ or gargle the morning of surgery but do not swallow the water. No chewing gum, breath mints or smoking are allowed the morning of surgery.
- Women - do not wear make-up (including mascara), jewelry, lotions, creams or perfumes. Acrylic nails and nail polish are allowed but no red polish.
- Remove contact lenses, hair pins, wigs, etc. prior to surgery.
- Hearing aids may be worn.
- Dress in loose fitting, comfortable clothes with flat rubber-soled shoes.

Arriving at the hospital

You will be in a day surgery area or holding area until time for surgery. To prepare for surgery, the nurse will ask you to remove your clothing and put on a hospital gown. You should remove contact lenses, dentures, wigs, hairpins, jewelry and artificial limbs. Please give these items to a family member or visitor to keep.

You will be asked to complete remaining paperwork, your vital signs will be checked and you will meet the anesthesiologist. You will have an IV started and receive some medication to help you relax. A family member may wait with you until it is time for your surgery.

After surgery you will remain in the recovery room for several hours while the effects of the anesthesia wear off. There, the nurses will frequently monitor your vital signs (heart rate, blood pressure, temperature and respiratory rate). The nurses will also check your dressing and circulation as well as movement in your toes and legs. Some high-risk patients will go to the Intensive Care Unit overnight for specially-monitored care.

WHAT TO EXPECT DURING YOUR HOSPITAL STAY

Your room: After you leave recovery, you will be taken to a private room. Although each patient's procedure and recovery is different, the usual hospital stay is 1 to 3 days.

Vitals signs: Your temperature, pulse, respirations and blood pressure will be monitored routinely.

Intravenous (IV) therapy: The IV line in your arm will give you fluid, nourishment and medications. Once you resume eating and drinking, these IV fluids will be stopped. The IV should not be painful. If it is, let your nurse know so that he or she can check it.

Pain management: Your pain medication may be given by a PCA (Patient Controlled Analgesia) pump attached to your IV or by injection. Once you are eating and drinking, you will be started on pain pills. Tell your nurse if you are not getting pain relief.

Diet: Once you tolerate liquids without nausea, you will be advanced to a regular diet.

Bathroom activities: If you have a catheter draining your bladder, it will remain in place until you are able to stand at the bedside or walk to the bathroom.

Special equipment: If you have a drain, it will be removed when your surgical dressing is changed or removed. The IV will be removed when you are tolerating liquids and have completed your IV medications.

Activity and walking: A physical therapist will see you twice a day. He or she will give you exercises to do in bed and will help you walk in the hall. You will also wear compression boots while in bed that automatically inflate and deflate, helping to pump the blood in your legs back up to your heart. The physical therapists will instruct you in the best way to get in and out of bed. Please allow the nurse or physical therapist to help you get in and out of bed until you can do it safely. Before you leave the hospital, you will receive discharge instructions. The physical therapist will review any activity precautions related to daily living.

Respiratory therapy: It is important to practice breathing exercises after surgery. The respiratory therapist will bring in a device called an incentive spirometer to help you practice deep breathing and coughing. This will help clear your lungs.

Discharge plans: The discharge planner may visit with you to plan your discharge if you have special needs. Most patients will be discharged home but some may go to a rehabilitation facility before returning home. Each patient will be evaluated during the hospital stay to determine if he or she needs rehabilitation or some assistance at home. The goal of your care after surgery is to help you become independent so you can return home safely. By discharge, you should be able to:

- Get in and out of bed by yourself
- Walk in the hallway with or without a cane or walker
- Climb stairs, if needed at home
- Bathe and care for your personal hygiene
- Understand all instructions for your recovery

Recuperation at home

CARE OF THE WOUND

- Once you are home, change your dressing with a clean, dry gauze dressing at least once each day. Change the dressing more often if you can see drainage. When you see no drainage 2 days in a row you may begin to shower. You may choose to leave the dressing off after that. Let water run over the incision but do not scrub.
- No tub baths, hot tub or swimming pool allowed until the incision is healed. Ask your physician first (minimum of 6 weeks).
- Do not disturb the steri-strips (the little strips of tape over your incision). They will fall off over time. If the edges become frayed, you may clip the edges but do not pull on the strips. They will gradually peel off as they get wet when you take a shower. They can be removed at your post-op visit.
- After the incision is healed (usually after 2 weeks) and the suture/steri-strips are removed, it is helpful to gently massage the healing scar several times each day to prevent scar adhesion and help improve the overall appearance of the scar once healed. When in the sun after the incision is healed, use sun block on the incision – SPF 50 or higher.

SIGNS OF INFECTION

Have someone inspect your incision each day. Please contact your physician to report any of the following:

- Redness
- Swelling
- Excessive drainage - yellow or green in color
- Temperature consistently greater than 101 degrees
- Odor from the incision
- Extreme heat at your incision
- Increasing pain at the site
- Flu-like symptoms in conjunction with the other symptoms

CONSTIPATION

The use of anesthesia and narcotic pain medications can result in constipation following surgery. The anesthesia puts everything to sleep, including your gastro-intestinal system, which makes your intestines very sluggish for awhile. Narcotic pain medication has a similar effect. To counteract this:

- Drink 6 to 8 glasses of water each day
- Eat high fiber foods such as whole grain cereals and breads, fresh fruits and vegetables
- You may use over-the-counter rectal suppositories and/or a laxative of your choice. Patient may have prescription at discharge.
- If there is still no relief, then you may purchase a "Fleets" enema

RESTRICTIONS

- No driving while on narcotics. If you are not taking narcotics, you may drive 3 days following surgery.
  - You may be a passenger, but limit rides to 30 minutes
- No sitting for more than 30 minutes at a time
- No lifting more than 10 pounds (a gallon of milk) for the first 2 weeks
- No sports activities (except the walking program below) until after your first appointment after surgery
- No sexual activity for 1 week. After 1 week you may lay on your back, if comfortable.

PAIN MANAGEMENT

You may have an occasional increase in the low back pain, leg pain and/or numbness after surgery during the healing phase. This is normal and is caused by inflammation (or swelling) of tissues in your low back. To reduce pain, there are several approaches to try:

- Ice the incision area for 20 minutes per hour as often as needed. Do not put the ice directly on the skin. Use a ready-made ice pack or put ice in a plastic bag and wrap in a towel before use.
- Avoid sitting more than 30 to 60 minutes at a time
- Decrease your activity for the next day or two
- Take the pain medicine as directed by your doctor (see additional details below).

PAIN MEDICATIONS

A certain amount of pain can be expected after surgery. However, there are many ways to manage your pain. It is our intention to provide you with as much relief from your discomfort as is safely possible. By the time you leave the hospital, you will be taking pain pills. **Do NOT drive while you are taking narcotic pain medicine.**

Remember that narcotic pain medicine contributes to constipation, which can increase your back pain. Try to move to extra strength Tylenol® as soon as possible. Your physician will determine the best pain medication for you. **You should not be receiving pain medication from any other source.**

Our obligation as your physician is to use these medications safely and appropriately. Our main concern is with their potential for abuse resulting in drug dependency if used inappropriately for prolonged periods of time. It is most important to avoid continued and prolonged use of narcotic medication. Drug dependence can happen to anyone if it is allowed to occur. Therefore, as part of good medical practice, we will be closely monitoring narcotic prescriptions originating from our office. We ask that you comply with our office policy regarding narcotic prescriptions:

- Your physician will prescribe enough medication for you until your first post-operative appointment.
- If you run out of pain medication because of inappropriate or excessive use, you will not be given additional medication until your regularly scheduled appointment.
- When pain medication must be used, it is important for you to monitor your medication use and anticipate how much medication you may need in the weeks ahead.
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- **If you have had a fusion, DO NOT** resume anti-inflammatory medications such as Advil®, Aleve®, Celebrex®, etc. for 3 months following your surgery. These medications can slow the growth of new bone and slow down the fusion rate.

ACTIVITY

- Many patients will initially require a walking aid such as a walker or cane for safety. You may slowly wean yourself from a walker to a cane, then from a cane to no aid as you feel comfortable.
- You may walk and climb stairs as much as is comfortable. Use pain as your guide.
- You may sleep on your back, stomach or side. You may use pillows for support placed behind your back or between your legs.
- It is important to begin a walking program once you leave the hospital.
- Do not sit or lay down for more than 30 minutes at a time during the day.
- You are encouraged to be as active as possible with walking. Avoid long periods of reclining/laying down to reduce the risk of blood clots in the extremities and pulmonary embolus.
- For your comfort, you should change your position every hour, or more frequently as needed.
- If you need to lift an object (less than 10 pounds) from the floor, squat with your knees bent. Do **NOT** bend at the waist to lift the object.
- **Walking Program:**
  - Day 1 (at home): Walk 1 block in the morning and 1 block in the afternoon/evening.
  - Day 2 and beyond: Increase your distance 1 block per day as long as it is comfortable. You should be walking 1 to 2 miles per day when you return to the office for your first appointment after surgery.

Follow-up care and physical therapy

FIRST POSTOPERATIVE VISIT

Your first visit to the office will be scheduled approximately 2 weeks after your surgery. You will have already been given an appointment at the time of your discharge from the hospital. This visit may include:

- X-rays of your neck or back
- Medication refills if needed
- Advancement of your current activities
- Restrictions will be adjusted according to your progress

During your early postoperative time, it is not unusual for some of the same symptoms you experienced before surgery (numbness, weakness, pain) to continue. It sometimes takes awhile for the nerves to recover. These continuing symptoms will be assessed at your first post-op visit.
If these symptoms are particularly distressing, do not hesitate to call the office. If you should have severe or disabling symptoms on weekends or after 5:00 p.m. on weekdays, please go to the nearest emergency room for there is nothing we can do by phone.

POSTOPERATIVE REHABILITATION

Early appropriate activity enhances recovery and promotes circulation from most surgical procedures. The type and extent of that activity is determined by the kind of surgery you will undergo. Initially, you will be assisted by physical therapists in the early walking and exercise programs. They will also provide you with discharge instructions about posture and body mechanics for your activities of daily living. Once discharged, depending on your needs, you may continue in a rehabilitation program designed to help recover your function. Exercise physiologists and / or occupational therapists may be added to your team. On occasion, your surgeon may recommend assistance from a chiropractor or a conservative medicine physician. Together, the goal of the rehabilitation team is to help you obtain the most improvement in your recovery that is possible.

RETURN TO WORK

Your return to work will depend on your recovery and the type of work you do for a living. You must discuss this with your doctor before you return to work.