Eric L. Lin, MD Orthopaedic Spine Surgery

Anterior Cervical Diskectomy and Fusion

Pre-operative, Post-operative and Home Recovery Instructions

Introduction

The purpose of this guide is to provide you and your family with information regarding your medical condition and planned surgery. This information is part of your medical "Informed Consent". Please read it and follow the advice carefully. You should retain the guide for future reference and bring it with you to office appointments and to the hospital for reference.

Preparation for Surgery

In preparation for surgery you will have blood drawn for analysis. You may also require an electrocardiogram (ECG), and a chest X-ray. These are scheduled prior to surgery. These tests performed before your scheduled surgery may allow your physician to identify particular health problems that could require further evaluation before anesthesia and surgery. Diagnostic imaging studies of the neck, such as X-rays, CT or MRI scans, a bone scan, and possibly a myelogram, may already have been performed and provide your surgeon with anatomic detail for surgery. Other electrodiagnostic tests (EMG/NCV or SSEPs) may give additional, important information. Discontinue aspirin or anti-inflammatory medications 1 week prior to your surgical date. Eat a light dinner before 7 P.M. on the evening before your surgery. **Do not** eat, drink, smoke, chew, or swallow **anything** after midnight the night before surgery except as directed by your physician. The hospital will notify you of the time and location where you should arrive before your surgery. Do not accept or follow any other directions unless you discuss it with our office.

Family Waiting

After surgery, Dr. Lin will meet with your family in the surgical waiting room unless otherwise arranged. Please have a representative available in the waiting room to gather the family upon completion of surgery.

After Your Operation

Pain

After surgery you may experience pain in the region of the incision. Some neck and arm pain as well as tingling or numbness may also be present. Initially it may be of greater intensity than preoperatively, but will subside over time as the healing process occurs. This discomfort is caused from surgical retraction of tissue as well as inflammation and swelling of the previously compressed nerves. You may also experience pain at the bone graft harvest site. This pain will also subside but frequently takes longer to resolve, and swelling in this area is expected. Some patients experience a sore throat and swallowing difficulty after general anesthesia and surgery. This is from manipulation of tissue and the presence of the breathing tube for anesthesia. The sore throat usually will subside within a week. The swallowing difficulty may take longer. Using throat lozenges or lemon drops, sipping cool liquids, or sucking ice chips may soothe this pain.

Narcotic pain medication will be available for pain relief after surgery. Narcotics are very effective for pain relief but may cause other side effects including sleepiness, nausea, constipation, flushing, sweating, and occasionally euphoria or confused feelings. If these occur notify your nurse. For your protection, you will receive oral narcotic medication only when requested. Alternatively, you may be given a Patient Controlled Analgesia (PCA) pump. This allows you to depress a switch which delivers pain medication directly into your IV, obviating the need for repeated intramuscular injections. Its use is closely monitored by the nursing staff.

Activity

Feel free to move about in your bed. The nurse or therapist will assist you in getting out of bed for a short walk a few hours after surgery. You will be instructed to be up walking every 2 to 3 hours during the day and evening. As you recover, the nurse will allow you to do this independently once you are steady and feel comfortable. Early activity after surgery is extremely important to help prevent the complications of prolonged bed rest such as pneumonia and blood clots. It also promotes fusion healing, relieves muscle stiffness, allows for development of a well-organized scar, while improving your outlook and overall recovery. Elastic stockings (TED hose) will be placed immediately after surgery to prevent phlebitis (inflammation in your veins) in your legs. You may remove them after being discharged from the hospital. Do not start any programs of exercise or physical therapy unless discussed with our office.

Diet

Your diet will begin with clear liquids, and be advanced to your normal daily diet as soon as your condition permits. Your IV will be removed as soon as we are reasonably certain it will no longer be required for medications and hydration.

Bowel and Bladder Function

During surgery you may have a catheter (tube) in your bladder to monitor your urine output. Upon its removal you may feel a stinging sensation for 2 to 3 days, which is normal. Some patients may have difficulty urinating after surgery. If this occurs, notify your nurse who may assist you in voiding techniques. Infrequently, this may require replacing the catheter. After surgery, constipation frequently occurs from relative inactivity and the side effects of pain medication. Stool softeners and laxatives will be available.

Respiratory Hygiene

Deep breathing is very important after surgery to maintain lung expansion and reduce the risk of pneumonia. You will be provided with an incentive spirometer and instructed about its use. This device should be used every 15 to 30 minutes during your wakeful hours initially, then every 1 to 2 hours as your activity returns to normal. This device is yours to take home. Continue to use it at home for at least 1 week after your discharge.

Smoking is absolutely forbidden. There is clear evidence that smoking dramatically increases your risk of post-operative complications. There is also evidence that smoking adversely affects bone healing and nerve recovery. Second hand smoke also applies, so family members and friends should avoid smoking while around you.

Use of Your Neck Collar

A cervical collar will be applied immediately following surgery. Support and immobilization after surgery minimizes the risk of displacement of the bone graft. It serves as a reminder and keeps your head supported. It also reduces discomfort and facilitates healing. The collar is to be worn for approximately 2 to 6 weeks after surgery. Our office will advise you when its use may be discontinued. If you have a soft cervical collar, it may be removed only when showering. The collar should fit snugly, yet comfortably. It should allow only minimal motion. Do not "fight" the collar; cooperate with it. This will assist in bone healing and minimize neck discomfort and skin irritation. An information sheet will accompany your collar and instruct you on its proper care and use. You may find that two collars are convenient, wearing one while the other dries.

Home Recovery

Follow-Up Appointment

Patients are generally discharged from the hospital 1 to 2 days after surgery. Upon arrival home, please call our office to arrange your first follow-up appointment. You will need an X-ray of your neck either the day before or the morning of your appointment. You must bring the X-rays to your appointment for review.

Incision Care

Keep the dressing you were discharged with clean and dry. It does not need to be changed. At this point, hygeine should be performed by sponge bathing. After the first week, discard the dressing and begin showering daily. Pat the incision dry and leave the incision open to air. Steristrips may be present to aid in holding the skin edges together. Allow these to fall off on their own. Do not soak your incision (ie. bath, spa, pool). Do not apply any ointments or creams.

Inflammation

Please take your temperature every afternoon for the first week after discharge and notify our office if:

- your temperature taken by thermometer, is more than 101.5 degrees,
- · your incision becomes increasingly reddened, swollen or any drainage occurs, or
- you experience a significant increase in pain, numbness/tingling, weakness or loss of control of bowel/bladder

Nutrition

As mentioned previously, swallowing may be difficult initially. Until this resolves, you should eat soft and/or cooked foods that are cut finely. A regular diet may be resumed as tolerated. A well-balanced diet is necessary for good healing and recovery. This includes food from the four basic food groups: breads/grains, dairy products, meat, vegetables/fruit. Use of narcotic pain medication and prolonged rest may cause constipation. Drinking plenty of fluids and eating high fiber foods (whole grains, raw fruits and vegetables) will help regain normal bowel function. Dieting is not recommended at this time since calories are necessary for proper healing.

Home Pain and Medication

Everyone has a different pain tolerance that will dictate the amount of pain medication required. A decreased dose and less frequent use of pain medication will occur during your recovery period. A gradual weaning of medications should begin as soon as possible, generally within 2 to 4 weeks. Conservative use of narcotic pain medication is advised, since long-term usage may result in dependency/addiction. You should try non-narcotic medication, such as acetaminophen (Tylenol), and reserve narcotics for more severe pain. Over the counter stool softeners, such as docusate sodium (Colace), may be used with narcotics if constipation becomes a problem. Do not take aspirin or anti-inflammatory medications (ie ibuprofen, Advil, Motrin, Alleve, Naprosyn), as this class of medication increases your risk of bleeding and may impair fusion healing. Please note that narcotics will not be considered for refills on evenings, weekends, or holidays. When you go home, although you may not realize it, you are typically more active than you were in the hospital. As a result, you may experience more pain as your activity level increases. This is expected and no cause for alarm.

When we surgically relieve pressure from an inflamed/damaged nerve, it does not recover instantaneously. The surgical procedure does not heal the nerve, only the body is capable of that. The goal of surgery is to create the best possible environment for the body to heal itself and to prevent further damage. This will take a variable length of time depending on the duration and degree of nerve damage and the body's own healing abilities. Thus, you may experience some numbness/tingling in your arms intermittently. This is not uncommon and will improve as you heal. Most of the healing occurs in the first few months. Pain, weakness, or numbness lasting more than six months will likely be permanent.

Home Activity

Your recovery is an essential part of your surgical process. Following these general guidelines and the instructions given to you by Dr. Lin and his staff, will provide you with the best opportunity to return to your desired activities as quickly and completely as possible.

First Week
□ Early to bed, late to rise and frequent rest periods throughout the day. Get at least 8 hours of sleep each night. A disrupted sleep pattern is common after discharge from the hospital and will
return to normal over time.
\Box You may not drive, but you may be driven, for short distances, using proper restraints such as shoulder and lap belts.
□ No lifting of more than 4 pounds
□ May climb stairs with hand rail
□ Begin a daily walking program with 1 to 2 blocks initially; schedule a daily time and increase distance daily.
☐ Take medications as prescribed, using narcotics as needed.
$\hfill \square$ Practice good neck posture and wear your collar at all times, including sleeping and sponge bathing (remove only for dressing changes)
Second Week
 □ Resume normal rising and retiring schedule, but continue to rest throughout the day. □ Continue scheduled walking, increasing distance and frequency as able. □ May remove collar for showering
☐ May resume sexual intercourse, while wearing the collar, when comfortable.
 □ Begin narcotic weaning as pain diminishes, relying mainly on non-narcotic medications □ Follow-up in the office, as scheduled, for further instructions.
Third Week
□ Resume normal rising and retiring schedule, resting as needed.
 □ May resume light work around the home; lifting not to exceed 10 pounds. □ Continue scheduled walking.
Faculty Waste

Disability

The usual period of recovery for cervical disc surgery is 6 to 12 weeks and complete healing may take from 3 to 6 months. Some patients may return to work sooner than others depending on their job, response to surgery, and ability to perform other lighter tasks in the work place. Physician approval is required prior to returning to work. If your employer requires documentation of your work status, our office will provide the necessary information to your employer or other concerned parties. All disability matters may be handled by contacting our office. A mild physical therapy program may be initiated after 6 weeks. This will depend on how your fusion is healing. A more aggressive physical therapy regimen will be initiated on follow-up visits dependent on X-ray verification of your fusion status.

☐ Continue scheduled walking. Goal to be 1 mile/day at this point.

Please feel free to contact our office for any questions/issues regarding your planned surgery or post-operative care.

Fullerton: Breeana Callaham – 714-446-5461; Renee Camacho, MA – 714-446-5309 Irvine: Julia Gomez, MA/Veronica Reyes, MA – 949-340-9622