



Anterior Cervical Discectomy and Fusion (ACDF)

What is done during the surgery?

Surgery to relieve pressure on the nerves and spinal cord in the neck can be from an incision, or cut, in either the front (anterior) or back (posterior) of the neck. One of the most common operations is called an anterior cervical discectomy, in which a cut is made in the front of the neck and the structures of the neck are moved aside to reach the cervical disk in front of the spinal cord. Under a microscope the disk is removed, along with any bone spurs that are causing pressure. This is usually combined with a fusion procedure, in which a graft is placed to replace the disk. Over time your own bone will grow into and replace the graft and that level will be solid bone. This bone healing takes months, and often a small plate will be attached to the front of the spine with screws to hold things in place during the healing process. This surgery can be done at 1 or more levels. A corpectomy is a similar procedure in which 2 or more disks and the bone between them are removed.

What is put into the spine?

Bone graft from the bone bank, which is donated by patients. The bone is treated to eliminate any infection and has no living cells in it, so it will not be rejected. The bone is monitored and tested for infection. The other implant is usually a thin plate made out of titanium which is fixed to the bone with screws. You can have an mri with the plate in place and it does not set off metal detectors. The plate is not usually removed unless there is a problem with it.

What symptoms is the surgery designed to help?

Pressure against the nerve may cause pain running down the arm along with numbness and weakness. Spinal cord pressure can produce numbness and weakness of both arms and the legs as well. Recovery varies, but generally nerve symptoms have a better chance of improving than pain in the middle of the neck itself, which may be from many factors.

What are the risks of the surgery?

The surgery does not always provide complete pain relief. The risks of the procedure include anesthetic complications, such as lung or heart problems, bleeding, the need for blood transfusions, and infection. Neurologic complications include nerve or spinal cord injury or spinal fluid leak. Other complications can arise from injury to the structures in the front of the neck, including the esophagus (swallowing tube), trachea (breathing tube) and the carotid and vertebral arteries. Injury to the recurrent laryngeal nerve occurs about 2% of the time and could lead to temporary or permanent vocal cord paralysis which could lead to hoarseness or trouble swallowing. There can be problems with the placement of the screws and plates leading to a need for another surgery to repair them and failure of the bone to heal. The risk of nonunion, or failure of the bone to heal, is much higher in smokers than nonsmokers. Slight drainage the first day or so, limited swelling or mild bruising is common and usually not of concern. If there is significant leaking or any marked redness or a large amount of swelling, you should call the office.

Discharge Instructions for Patients after ACDF or Corpectomy

Success of the surgery

A successful result after the surgery depends on a positive attitude and efforts by the patient to aid recovery. Your preoperative symptoms may take weeks or longer to improve fully. Generally, symptoms such as pain shooting into the arm improves first, followed by motor weakness. Numbness is often the last symptom to improve. Pain in the neck itself may be due to many factors and may improve slowly or persist to some degree.

Care of your incision

Your incision was closed with buried stitches and sealed with a liquid glue, called dermabond. You can shower after the surgery but you should not scrub your incision or soak in a pool, hot tub or tub bath for at least two weeks. It is ok to gently pat it dry. After a few weeks, the dermabond will peel off. If you need a hard cervical collar you will be instructed on how often to wear it. Soft (foam) collars can be used at any time if they make you more comfortable.

Pain Management

Most patients after ACDF and similar surgeries complain more of a sore throat than pain in the incision itself. Trouble swallowing large pills or dry food is common. Pain in the back of the neck and in-between the shoulder blades, lasting for weeks after the surgery is very common and usually not a cause for concern. A postoperative pain medication plan will be discussed at the preoperative appointment, and the "West Bay Orthopaedics & Neurosurgery Pain Management Agreement" will be discussed at that time.

Activity

Unless you have been instructed otherwise, you should focus on gentle walking the first 2 weeks after the surgery. You should start with brief walks in the house, and gradually increase the time and speed of your walks. It is best to limit stair walking to 1 or 2 times a day for the first week. As you feel better, you should start to take longer walks outside and up inclines. You should avoid driving or being in the car for the first 2 weeks. After that, start with short drives with another person in the car. You should avoid lifting anything heavier than a half-gallon of milk for the first 2 weeks. After that, you can start to lift light objects if you are comfortable. Remember-if it hurts, don't do it! Sexual activity can be resumed when you feel comfortable. You can discuss returning to an exercise regimen with your physical therapist.

If you have risk factors for bone healing such as obesity, smoking or diabetes, you may have been fitted for an external bone stimulator in the office. These need to be worn 4 hours a day to be effective. Most patients will need them for about 3 months.

Therapy

For most patients, working with a physical therapist after the surgery can help with the recovery process. You should have had a PT appointment and your post-op visit scheduled before surgery. If you have any questions, call the office at 739-4988.

Diet and medication

You can resume your regular diet immediately after the surgery. Your regular medications, including aspirin, can be restarted immediately after surgery. If you are taking an anticoagulant or "blood thinner" such as warfarin (coumadin), plavix (clopidogrel), pradaxa (dabigatran), or any other anticoagulant medication, you will be told when to restart the medication. You should then follow-up with the doctor who prescribes the anticoagulant medicine. Constipation is a common problem after spine surgery. Over the counter stimulants and stool softeners can be beneficial, along with plenty of fresh water.

Work

Most patients with lighter duty jobs return to work 4-6 weeks after the surgery. Patients whose jobs require heavy lifting may take longer. Your return to work will be discussed in your office follow up appointment.

Follow up Appointments

Your office follow up appointment should have been set up at the time of your preoperative appointment. It is usually about 4 weeks after the surgery. You will need to have neck x-rays done on the day of the appointment. Most patients will need another follow-up about 13 weeks after the surgery, also with x-rays.

What to Watch Out For

These symptoms should cause you to call immediately or dial 911 to come to the emergency department

- Large swelling in the neck with trouble breathing
- Paralysis or inability to fully move your arms or legs
- Severe chest pain, difficulty breathing
- Loss of control of your bowels and bladder

The following symptoms may indicate a problem. You should call the office number listed below.

- Fever higher than 101 F
- Increasing neck and/or arm pain
- Difficulty passing urine
- New numbness or change in symptoms from before surgery
- Redness or drainage from the incision

For questions after the surgery, please call 739-4988. After hours, the answering service will respond and page the doctor in an emergency.