Patient Instructions: Anterior Cervical Discectomy and Fusion (ACDF)
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Surgical Technique

An anterior cervical discectomy is the most common surgical procedure to treat damaged cervical discs. Its goal is to relieve pressure on the nerve roots or on the spinal cord and/or treat a painful disc. It is called anterior because the cervical spine is typically reached through a small incision in the front of the neck (anterior means front). During the surgery, the soft tissues of the neck are separated using minimally invasive techniques. The disc is then removed and pressure is taken off of the nerve roots and spinal cord using an operating microscope and microsurgical technique. After removing the disc and performing microsurgery, a small spacer is inserted into the disc space. This may be made out of cadaveric bone, PEEK (a body-friendly polymer spacer), or even the patient's own bone. This bone or mixture of bone fills the disc space and ideally will join or fuse the vertebrae together. The graft is usually held in place with a small metal plate on the front of the vertebrae and some screws. Over time, the vertebrae grow together; this is called fusion. It can take several months, and even up to 1 to 2 years, for this process to completely occur.

Before Surgery

Seven days prior to surgery, please do not take any anti-inflammatory NSAID medications (Celebrex, Ibuprofen, Aleve, Naprosyn, Advil, Motrin, etc.) as this could prolong your bleeding time during surgery. Do not eat or drink anything after midnight the night before surgery. This means nothing to drink the morning of surgery. You may, however, take your normal medications with a small sip of water if needed. This includes your blood pressure medicine, which in general should be taken. Consult your surgeon or primary care doctor regarding insulin if you take it.

Please do not be late to check in on the day of surgery, or it may be delayed or even cancelled/rescheduled. Please bring your preoperative paperwork with you and have it when you check in. If you have a copy of your MRI or X-rays, please bring these with you even if your surgeon has seen them already or might have a copy. Surgery may need to be cancelled if we do not have your radiographic images available.

Please be aware that smokers are recognized to have a significantly higher risk of postoperative wound healing problems, as well as operative and postoperative bleeding. Smoking disrupts the normal function of basic body systems that contribute to bone formation. Smokers must understand and agree to discontinue smoking for at least two weeks before and after surgery. Although it helps to stop smoking for several weeks before and after surgery, this does not eliminate the increased risk resulting from long-term smoking.

After Surgery

You may experience a lump feeling when swallowing, excessive phlegm production, or a sore throat after anterior cervical spine surgery. Due to the nature of this approach and intraoperative manipulations, you may experience temporary side effects such as dysphagia (difficulty swallowing) and hoarseness of voice.

The degree of postoperative pain varies significantly, but patients usually have minimal pain at the incision site. It is more common for patients to experience pain at the base of the neck and between the shoulder blades from disc space distraction. Swelling in the throat area, swallowing difficulties, hoarseness, and other side effects generally reach a peak between 2–5 days after surgery and will then begin to subside. You may want to sleep with the head of the bed elevated for the first 5 days to minimize these symptoms.

Activity Level

Walking is the best exercise after surgery. It strengthens muscles, increases endurance, relieves stress, and—most importantly—helps maintain proper blood flow, keeps the bowels moving, and prevents fluid from building

up in the lungs. Soon after surgery, patients are encouraged to get up and walk, gradually increasing the distance. The sooner a patient becomes active, the sooner they will resume their normal routine.

Do not lift more than 5–10 pounds for the first four (4) weeks after surgery. This may be increased to approximately 20 pounds after 6 weeks. Do not lift anything greater than 20 pounds for the first 3 months. Avoid prolonged upright sitting on hard surfaces or long car rides (more than 30 minutes) for 2–4 weeks.

You may drive after approximately 1–2 weeks, provided you are not under the influence of pain medications. However, if you are wearing a hard, fitted cervical collar, you will be advised to avoid driving. Limited bending or twisting of the cervical or lumbar spine is advised to minimize additional stress on the spine during the early healing stages. If physical therapy has been prescribed, you are not to perform range of motion, flexion, extension, or lateral bending until fusion is documented. Avoid activities where there is the potential for a fall or physical contact until cleared by your surgeon. A hard cervical collar should be worn at all times, except while in the shower. It should be immediately replaced after a shower.

Bandage / Bathing / Diet

Bandage: The bandage (if present) may be removed on the second day following surgery (for example, if surgery was on Monday, remove the bandage on Wednesday). Do not remove or peel off any skin glue that may be on the incision itself. Steri-strips should be left intact on the incision until you return to the clinic for your postoperative follow-up 7–14 days following surgery.

Bathing: You may shower on the third day following surgery. Try to limit showers to no more than 5–7 minutes. Do not scrub the wound. Let water run over the incision, then pat it dry with a clean towel. Do not soak in a bathtub, hot tub, or pool for at least 2 weeks.

Diet: Narcotic pain medications are very constipating; be proactive with stool softeners and laxatives. A high-fiber diet is recommended. Avoid straining on the toilet. Keep stools soft with a high-fiber diet and/or use of prune juice, Metamucil, Fiber One cereal, etc.

Pain Medications

Do NOT take any NSAIDs (non-steroidal anti-inflammatory drugs) such as Aleve, Motrin, Ibuprofen, Naproxen, Advil, etc., for 6–12 months after surgery, as these can greatly lower the chance of full healing. Tylenol can be taken as needed. Narcotic pain medications are prescribed if Tylenol is inadequate. You should not let pain get out of control before taking medication, or it will be less effective. We will not be able to refill pain medications over the weekend or after hours; please anticipate your need for refills.

Follow-up

Call California Neurosurgical Institute to schedule your routine post-surgical visit for 10–14 days after surgery, if one hasn't been set up for you already. Additional follow-up appointments will be scheduled as needed.

Please call your physician's office immediately or go to the emergency room if:

- Drainage and/or pain increases at the incision site
- Fever is greater than 101.5 degrees F
- Swelling and tenderness develops in your legs
- You experience new, persistent pain, weakness, or numbness in your back/neck and legs/arms
- You have problems controlling your bladder or bowels

Other FAQs

How long will I be in the hospital? This varies depending on the type of surgery, but for some one- or two-level surgeries, you may go home the same day; otherwise, you will go home the following day. Patients generally prefer the comfort of home, which also lowers the risk of hospital-acquired infections and blood clots.

How much time off from work? Typically, 1–2 weeks for sedentary/desk jobs is sufficient. Physically demanding jobs may require 4–6 weeks, at the discretion of your surgeon.

When can I resume driving? Generally about one week after surgery, provided you are not taking narcotic pain medications. If you have a fitted hard collar, driving is not recommended as it limits your ability to turn your head.

Will I wear a cervical neck collar? Most patients wear at least a soft collar for approximately one month. Multilevel fusions may require a stiffer collar for a longer period. The collar should be worn at all times except while showering.

Will I need Physical Therapy? We usually recommend physical therapy and will provide a referral at your first postoperative visit. Please limit bending and twisting; avoid pushing, pulling, or range of motion (ROM) exercises for 3 to 6 months until the fusion is solid. A good rule of thumb is: "If it hurts, don't do it."

Do I need antibiotic prophylaxis for dental procedures? Avoid routine dental cleaning and simple procedures for 3 months following surgery. If a procedure is necessary within that window, antibiotic prophylaxis is advised. Please consult your primary doctor or dentist regarding the choice of antibiotic.