



ANTERIOR CERVICAL DISCECTOMY AND FUSION (ACDF)

What is it?

Anterior means “front,” and discectomy literally means “cutting out the disc.” This procedure is performed to remove a herniated or degenerative disc in the cervical (neck) spine. Dr. Eisler reaches the damaged disc from the front of the spine. The damaged disc is removed and a graft is inserted. The graft serves as a bridge to create a spinal fusion. Often the bone graft and vertebrae are immobilized and held together with metal plates and screws. Depending on your additional health conditions, surgery may be performed on an outpatient or inpatient basis. Recovery and subsequently returning to work (depending upon activity level of work) is usually approximately 4-6 weeks. After 3-6 months the bone graft should join the vertebrae above and below to form one solid piece of bone. Depending on the number of levels fused, you may be a candidate for a Bone Growth Stimulator Device.

Types of Bone Grafts include autograft bone, allograft bone, and bone graft substitute. Each type has advantages and disadvantages. Dr. Eisler will make the decision on which type of graft applies to you based on a multitude of factors specific to you and your medical history.

Autograft bone comes from you. At the time of surgery Dr. Eisler will take bone cells from your hip (iliac crest). This graft has a higher rate of fusion because it has bone growing cells and proteins. You will experience pain in your hip after surgery.

Allograft bone comes from a donor (cadaver). This bone is collected from people who have agreed to donate their organs after they die. This graft does not have bone growing cells or proteins, yet it is readily available and eliminates the need to harvest bone from your hip.

Bone graft substitute comes from man made plastic, ceramic, or bioresorbable compounds. Often called cages this graft material is packed with shavings of living bone tissue taken from your spine during surgery.

After fusion you may have some range of motion loss, this will vary according to neck mobility before surgery and the number of levels fused.

Who Is a Candidate?

- Diagnostic tests (MRI, CT, Myelogram) showing you have a herniated or degenerative disc.
- Significant weakness in your hand or arm
- Arm pain worse than neck pain
- Symptoms are not improving with conservative measures such as physical therapy or medication

Conditions Treated:

- Cervical Spinal Stenosis
- Cervical Disc Herniation
- Cervical Radiculopathy or Myelopathy
- Degenerative Disc Disease

What Happens During Surgery?

Preparation: You will lie on your back on the operating table and will be given anesthesia. Once asleep, your neck area is cleansed and prepped. If a fusion is planned and your own bone will be used, the hip area is also cleansed and prepped.

Incision: A two inch skin incision is made on the right or left side of your neck.

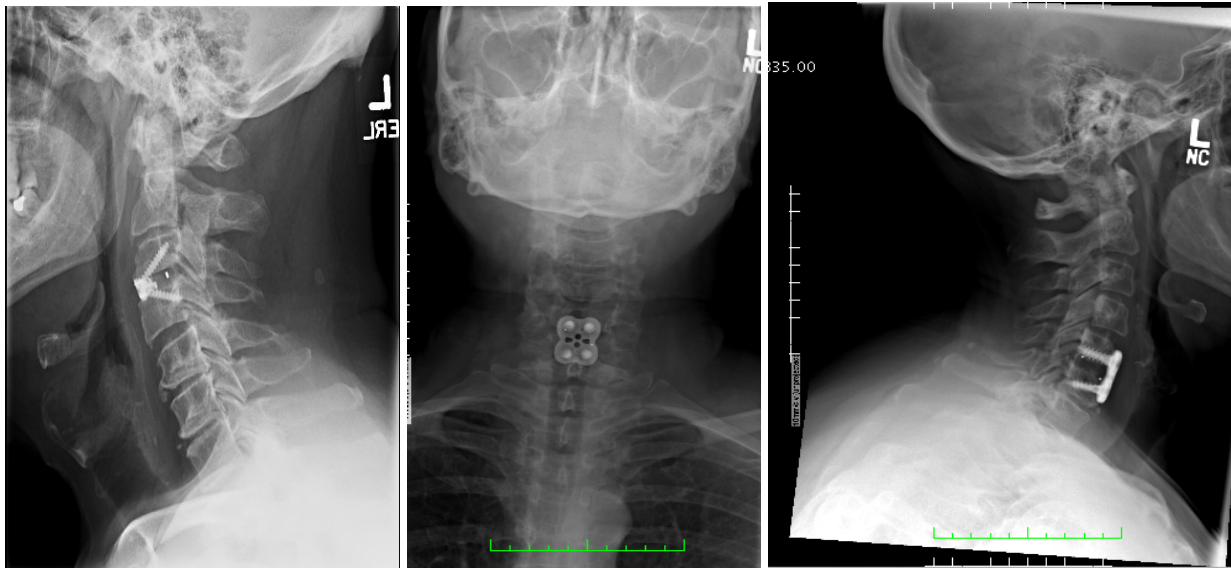
Remove Disc/Decompress The Nerve: The surgeon uses surgical tools to remove the disc. Any disc material pressing on the spinal nerves is removed. Bone spurs that press on your nerve are removed and the canal through with the nerve passes is enlarged.

Fusion: There are several ways to create a fusion, it depends on the patient, condition, and surgeon's preference. Fusion is the joining of two vertebrae with a bone graft held together with hardware such as plates, rods, hooks, pedicle screws, or cages. The goal of the bone graft is to join the vertebrae above and below to form one solid piece of bone. Dr. Eisler will use one of the three methods of bone graft mentioned above.

Closure: The muscle and skin incisions are sewn together with sutures. Steri-Strips or biologic glue is placed across the incision.

Photos for Website

A: Single Level ACDF



B: Multilevel ACDF

