

SpineFAQs

Anterior Cervical Discectomy & Fusion (ACDF)

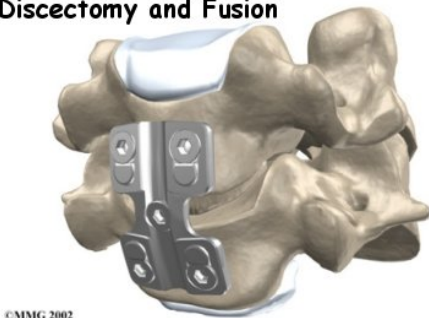
What is ACDF?

Anterior Cervical Discectomy and Fusion is a commonly performed procedure in patients with painful herniated discs or pinched nerves in their neck. Basically it involves removing the disc and decompressing the nerves, then stabilizing the bones by fusing them together.

Tell me more...how is the surgery done?

You are brought to the operating room and given general anesthesia. After being positioned on your back with your arms tucked at your sides, an incision is made. I usually use a horizontal incision on the left side of your neck near the Adams Apple. The exact location depends on the level we are operating on. Sometimes if we are doing more than one level, the incision will be vertical. I operate on the left side because it is easier to protect the nerves that run your vocal chords from harm.

**Anterior Cervical
Discectomy and Fusion**



After making the incision, the swallowing tube (esophagus) and breathing tube (trachea) are carefully moved to the right, and the carotid artery is moved to the left. I am then right on the spine. After confirming the right level, the disc is removed with instruments. An operating microscope is then used to allow

me to take the pressure off of the nerves and spinal chord. Once the pressure is off, I fill the gap left between the bones with a bone graft spacer, and place a thin metal plate and screws to lock things together. The wound is then closed after placing a thin drain tube.

Where does the bone graft spacer come from?

You have a choice...we can take some bone from your own pelvis (called autograft), or we can take the same type of bone from the bone bank which is harvested from a dead person (called allograft). There are advantages and disadvantages to both. The advantage of autograft is that there is no risk of transmission of any diseases. The disadvantage to autograft is that you will have pain from a separate wound (which may be greater than your neck pain). Also, there is an increased risk of wound infection, nerve injury at the thigh, and wound healing problems of this second incision. The advantages of allograft are the plentiful supply and the fact that there is not an additional wound. The disadvantage is that it is obtained from another person, theoretically there is a risk of disease. This, however, is extremely rare.

Why would you choose allograft vs. autograft?

In general, unless there is a religious reason to choose autograft, or there is a fear of allograft, I recommend allograft. I think the results are equal, and the recovery (return to activity, less pain) is better and faster with allograft. I will use whichever bone you prefer.

What are the risks of ACDF surgery?

While there is a long list of possible risks and complications, they are very rare. Infection happens in less than 1% of the time.

Damage to the esophagus/trachea/carotid artery is very rare. Paralysis is possible, but the microscope makes this an exceedingly rare event. Hoarseness can occur, this usually lasts less than six weeks. Permanent hoarseness is rare. Many people complain that their swallowing is hard for a short time, but this usually resolves within six weeks. Some people have persisting arm pain or numbness for a while, but this almost always goes away. Because we are not replacing your spine with a new one, it is possible for the remaining discs/joints to wear out, and this can lead to a similar problem in the future. We have no way to predict, however, when this might occur. Sometimes the bone does not fuse, but it is uncommon for this to be a problem.

What happens after surgery?

Most people spend the night in the hospital, and are discharged home the following day. You are allowed to walk and move your head when comfortable. It is uncommon to need a neck brace/collar or physical therapy after surgery. Usually people who do office work can return to work within 2-3 weeks after surgery. It will take a laborer 6-12 weeks to return to work.

It takes about 3-6 months for the bones to fuse together, but once fused, they are strong. Most patients can return to any activity...even contact sports.