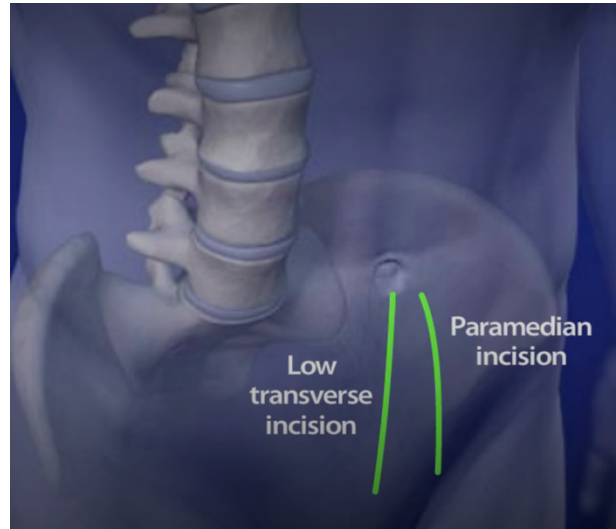


## Anterior Lumbar Interbody Fusion (ALIF), Explained

by Bishop Magehee, PA-S

### Overview

An Anterior Lumbar Interbody Fusion (ALIF) is a surgical procedure where Dr. Baker will remove one or more of the fibrous discs that sit between the bones that make up your spine (aka your vertebrae) through an incision on your belly, as pictured to the right. A special bone graft is then inserted in the disc's place between the two vertebrae, allowing the two to fuse together. All of this is done to decompress the spine and relieve symptoms. From here, the operation site is closed and sealed threefold: through stitches, staples, and gauze.



### The Details

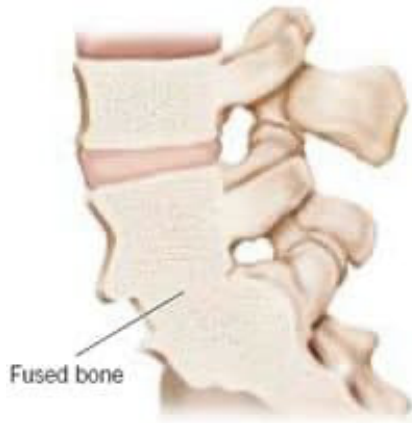
To understand what an ALIF is, we look to the meanings of each word in its name. Each half of the title tells us:

- 1) AL = Where the surgery happens, and
- 2) IF = What the surgery does

To start, the surgery is “Lumbar”, meaning it pertains to the lower back, and “Anterior”, meaning we approach the spine from the front, rather than the back—sometimes, this is done with the assistance of a vascular surgeon to move the major blood vessels out of the way.

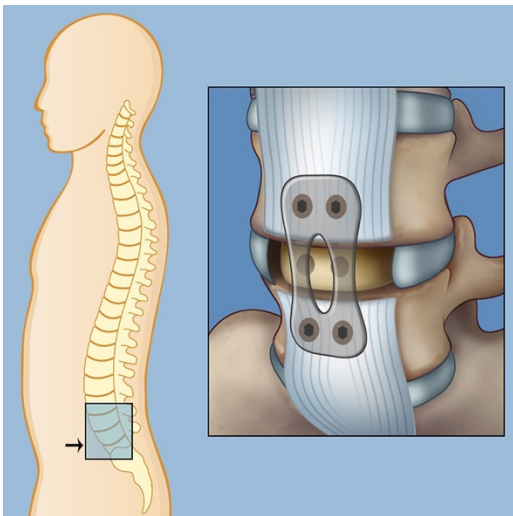
And what about the “Interbody Fusion”? When the discs in your spine become swollen for one reason or another, they expand into the space where your spinal cord and nerves are found, pinching them, and causing symptoms. So, as mentioned before, Dr. Baker will remove one or more of the discs (as pictured to the right) in your spine using specialized surgical tools. This is done to relieve pressure on your spinal cord and treat your symptoms.





This where the “Interbody Fusion” comes into play: once the diseased disc is mostly or completely removed, Dr. Baker inserts one or more special bone grafts into the space left behind. Each graft is housed inside a metal “cage” and is made with bone or a suitable substitute—if possible, Dr. Baker will use your own bone tissue harvested from another part of your skeleton (the spine itself, if possible, or your hip bone), as this drastically speeds up the spine’s healing process. This healing, which occurs in the weeks and months following surgery, creates a bony bridge between the two vertebral bones and fuses them together (pictured left). This fusion ensures two things:

- 1) That the spinal cord remains decompressed, and
- 2) That the two vertebrae don’t grind against each other over time, causing symptoms of their own.



To assist the body with this fusion process, Dr. Baker may implant special rods or plates over each fusion site, anchoring them with screws. An example of such plates is pictured to the left. This is done to keep the fusion graft stable as your body heals. To finish the procedure, the surgical site is closed with a combination of stitches and staples, and is finally sealed with a sterile gauze.