Anterior Lumbar Interbody Fusion (ALIF)

Why do patients have a lumbar fusion?

There are numerous indications for lumbar fusion. These include spinal deformity, spinal trauma, spondylolisthesis, or severe disc degeneration. Spinal fusion can be performed with bone graft alone, bone graft plus screw and rod instrumentation, or with a spacer cage placed within the disc space. The specific indications for which type of fusion you will be receiving will be discussed at your preoperative office visit.

There are minimally invasive techniques and more traditional open techniques, and I choose the technique or combination of techniques that I think will best take care of your specific problem.

Preoperative:

The ALIF procedure involves an incision in the front of your abdomen, generally from the left side although either side is possible. We are able to move the contents of your abdomen out of the way and access your spine with minimal dissection and significantly less pain than the traditional posterior procedure. During the ALIF procedure I generally work with another surgeon to help me safely get access to the front of the spine.

The ALIF procedure is often times coupled with posterior image guided robotic or navigated pedicle screw instrumentation. Through a few small incisions on your back, screws are placed into the bones above and below the disk being fused, to stabilize the spine while the fusion heals. In some circumstances, depending on your specific condition - we cannot perform percutaneous pedicle screw instrumentation in the back and you may require a larger open procedure. This will be specifically discussed with you during your preoperative visit. Occasionally – an ALIF without a posterior procedure is performed.

Further instructions will be provided during the preoperative appointment.

Surgery:

The ALIF surgery, when performed with posterior image guided robotics or open instrumentation, typically takes about four to five hours to perform, but can take longer in more complex surgeries. You will be under a general anesthetic during this time period. You will most likely stay as an inpatient in the hospital for one to two nights.

If an open posterior procedure is required, the surgery will take longer. Sometimes, in more complex procedures your surgery may occur over two days.

On the first post-operative day, you will be assessed by a physical therapist and an occupational therapist, and usually stand and walk a short distance. Prior to discharge, you will be independent in walking, getting in and out of bed, and going to the bathroom. If you have stairs to climb at home the therapist will practice this with you in the hospital prior to discharge.

Post-Operative:

You will be given several different medicines to help control your pain. These medications are weaned over a 1-3 week period.

The bandage that you go home with should be kept on for 2 weeks. It is ok to shower as long as your bandage remains clean and dry. If it gets wet or saturated it may require changing. Please give us a call if this occurs.

You may begin a walking program immediately upon discharge. A short 10- to 15-minute walk per day is all that we ask you to do over the first three to four weeks, and you can increase your walking distance as you see fit. Please refrain from any excessive bending, twisting, or lifting over 10 pounds. You will be prescribed a brace to wear after surgery. This brace should be worn when out of bed and can be removed when you are sitting or laying down. I ask that you refrain from any repetitive impact activity such as using a lawnmower (ride or push), boats, motorcycle, skid steer, or any other activity that can produce repeated jarring motions for 3-4 months after surgery.

Follow Up:

You will be given a follow-up appointment for two weeks following surgery. At this visit, we will inspect your incision and remove the surgical sutures if present.

By this visit, I do expect that you will have weaned off of your post-operative narcotic pain medication. It is fine to use Tylenol at any point following surgery, provided there is no other medical reason that you should be avoiding it. Please do not take and NSAIDs (aleve, advil etc) as this can delay bone healing.

The second follow up appointment is in 6-8 weeks. We will again review your x-rays together to make sure nothing has changed.

The third follow up appointment will be in 12-14 weeks, after this visit you will likely no longer have any activity restrictions. I do ask that future follow-up appointments be kept at 6 months and 1 year following surgery for routine X-rays.

Constipation:

- To prevent constipation you should take the Colace 1 tablet twice a day (stool softener) until you have regular bowel movements, then can take once a day.
- You may also take over-the-counter Sennakot 1-2 tablets twice a day (gentle laxative)
- Take these medications until you have regular daily bowel movements, then decrease to once a day.
- You should hold these medications if you experience loose stool or diarrhea. It is also best to stay well hydrated to avoid constipation.

Smoking, Vaping, E-Cigarettes:
Failure of fusion is as high as 65% in smokers and nicotine users. Therefore, spine patients should not smoke or use nicotine for 6 months after surgery. This is your time to quit.

Do not smoke, as this interferes with bone healing. Smoking can also increase your risk of wound healing complications and infection. If you cannot quit – please refrain from smoking 1-2 months before and 6 months after your surgery.

CALL IMMEDIATELY IF YOU EXPERIENCE ANY OF THE FOLLOWING:

- Pain that is continually increasing or not relieved by pain medicine
- Any new weakness, numbness, tingling in your extremities
- Any signs of infection at the wound site: redness, swelling, tenderness, drainage
- Fever greater than or equal to 101° F
- Any change in your bowel or bladder function including inability to urinate or bowel or bladder accidents.
- New tenderness in your calf, redness or discoloration of the leg, new shortness of breath, coughing up blood, or chest pain. These may be signs of a blood clot.

Report to the local Emergency Department with chest pain, shortness of breath, difficulty breathing, or any other acute events.
You may not drive while taking pain medications and/or muscle relaxants.
Driving will be discussed at your first post operative appointment. Do not drive until cleared by your physician.