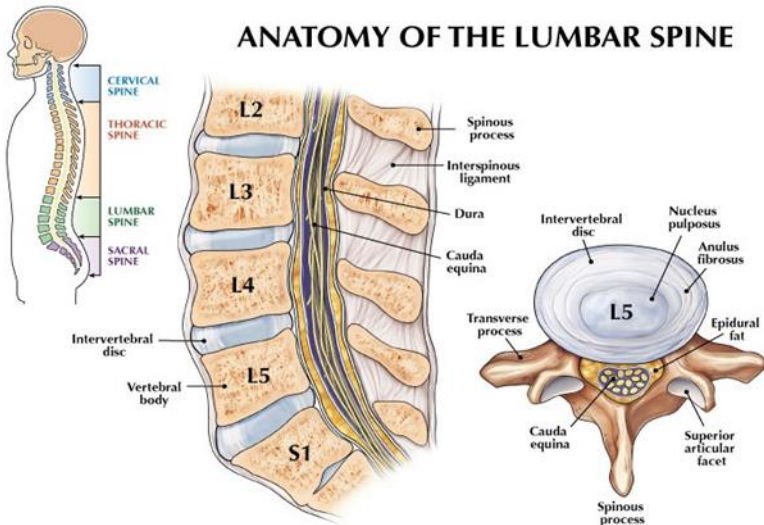


ANTERIOR LUMBAR INTERBODY FUSION (ALIF)



BRAIN & SPINE
CENTRE
SYDNEY



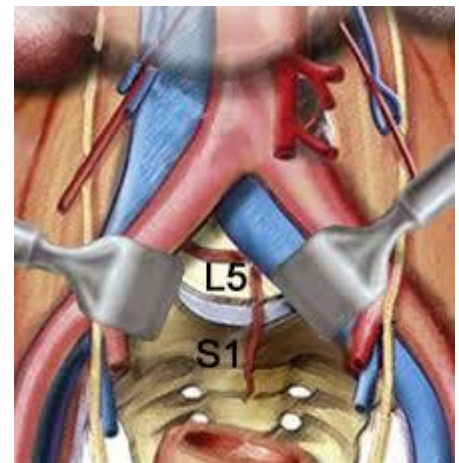
REASONS FOR SURGERY

Anterior lumbar interbody fusion (ALIF) is a spine surgery that involves approaching the spine from the front of the body to remove disc or bone material from in between two adjacent lumbar vertebrae. The procedure may be performed either as an open surgery or using minimally invasive techniques.

RISKS OF SURGERY

All surgery has some risks and these vary between procedures. The risks with surgery can be related to the anaesthetic, drugs or the operation. Risks related to the anaesthetic depend on your other medical issues and to the medications used. Generally, surgery is safe and major complications are uncommon. The chance of a minor complication is around 3 or 4%, and the risk of a major complication is 1 or 2%. Over 90% of patients should come through their surgery without complications.

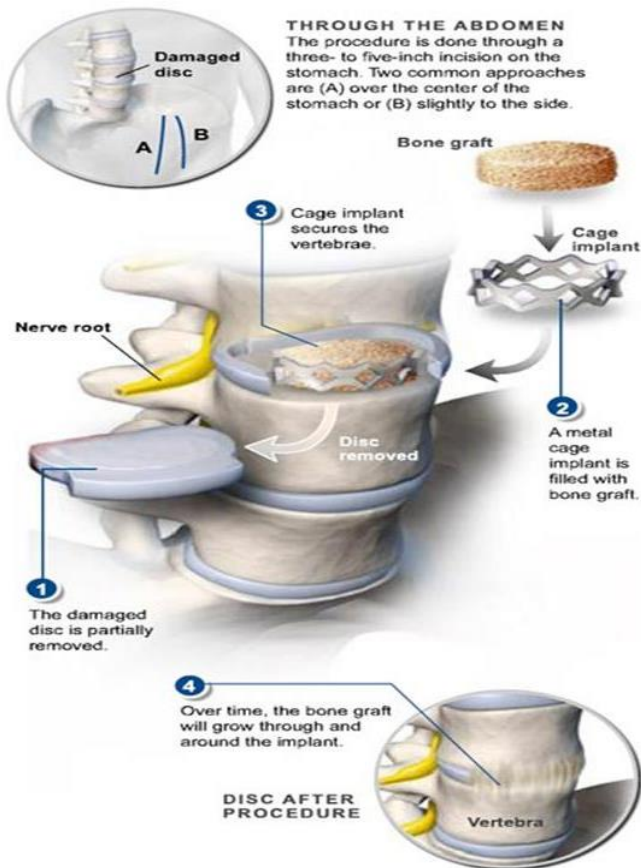
The risks involved with anterior lumbar interbody fusion surgery, include: bleeding; infection; nerve root injury – weakness, numbness, altered bowel/bladder/sexual function; spinal fluid leak, persistent or recurrent symptoms, general surgical problems – anaesthetic complications, chest infection, heart problems, clots in the legs/lungs, scar formation, failure of fusion of hardware and death. For males, another risk unique to this approach is that approaching the L5-S1 (lumbar segment 5 and sacral segment 1) disc space from the front has a risk of creating a condition known as retrograde ejaculation. There are very small nerves directly over the disc interspace that control a valve that causes the ejaculate to be expelled outward during intercourse. By dissecting over the disc space, the nerves can stop working, and without this coordinating innervation to the valve, the ejaculate takes the path of least resistance, which is up into the bladder.



PROCEDURE

You will be given a general anaesthetic so you are asleep throughout the procedure. The surgery is performed with microscopic magnification. In the anterior lumbar interbody fusion (ALIF) approach, the disc space is fused by approaching the spine through the abdomen. A 7-10cm incision is made in the abdomen and the abdominal muscles are retracted to the side. The anterior abdominal muscle in the midline (rectus abdominis), is retracted to the side. The abdominal contents lay inside a large sack (peritoneum) that can also be retracted, thus allowing the spine surgeon access to the front of the spine. The large blood vessels that continue to the legs (aorta and vena cava) lay on top of the spine, so your spine surgeon may perform this surgery in conjunction with a general surgeon who mobilizes the large blood vessels. After the blood vessels have been moved aside, the disc material is removed and a cage filled with bone morphogenetic protein (BPM) is

inserted. The incision is closed with dissolvable sutures and a drain tube removes the blood that collects at the surgical site.



DISCHARGE

Most patients go home 5-7 days after surgery. You will be reviewed by the physiotherapist to determine suitability for discharge. You must also be able to eat, drink and go to the bathroom prior to discharge. The pain should be easily controlled with pain tablets. You should discuss with your neurosurgeon when to resume any blood thinning medications which have been stopped for the surgery. In some cases, it is necessary to have some rehabilitation before going home. This will be organised during your hospital stay.

You should continue with regular gentle exercise on discharge as well as any exercises given to you by the physiotherapist. You should avoid activities such as heavy lifting, moving objects, bending or twisting, prolonged sitting or standing. You should not swim for 3 weeks after surgery.

You may drive when you are no longer taking narcotic pain pills. Limit driving to short trips and slowly increase your driving time. You may need to make plans to be off 4-6 weeks depending on the work you do. Heavy lifting may not be allowed for 12 weeks.

WOUND CARE

The wound will be closed with dissolving stitches and reinforced with sticky paper strips. The wound must stay covered for 1 week and the dressing changed each day after showering. After one week, the dressing may be removed and left off. The paper strips will fall off over 1-2 weeks.

Your wound will be healed within two weeks from your surgery unless there has been some reason to delay that healing. In addition people that have other medical problems such as: diabetes, people who need to take daily steroids for other conditions, and those people whose immune system may be compromised, may need additional time for their wounds to completely heal.

If there is any redness, tenderness, swelling or discharge of the wound, you should see your family doctor immediately.

FOLLOW-UP

You will need to be seen again by your neurosurgeon 6 weeks after surgery. X-ray imaging is performed at set intervals after the surgery to ensure adequate fusion is taking place

