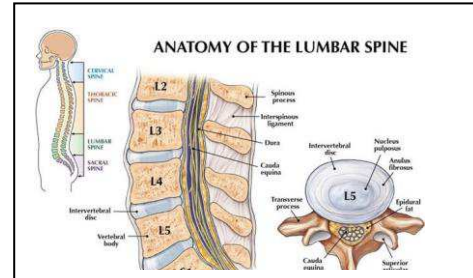


LUMBAR INTERBODY FUSION (PLIF, TLIF and MIS TLIF)

INDICATION FOR SURGERY

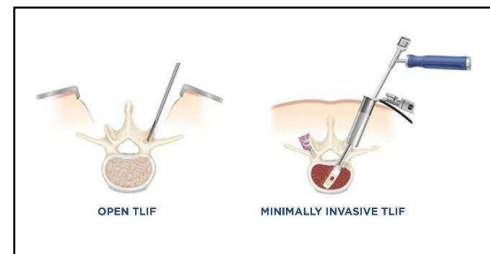
This surgery is indicated in those patients who have symptoms related to nerve root compression caused by narrowing of the central canal by ligament, disc material or bone as well as evidence of instability of the spine e.g. spondylolisthesis. This surgery is indicated once conservative options have failed or if symptoms such as leg pain, weakness, numbness, pins, and needles and/or backpain are worsening. Surgery aims to reduce pressure on the nerves and therefore relieves symptoms.



SURGICAL PROCEDURE

The patient is given a general anaesthetic at the start of the procedure to stay asleep. The surgery is performed with microscopic magnification. There are several approaches for accessing the disc space for a fusion is through an incision in the low back in a posterior approach: a posterior lumbar interbody fusion (PLIF), or a transforaminal interbody fusion (TLIF), XLIF (extreme Lateral Interbody Fusion) is an approach to spinal fusion in which the surgeon accesses the intervertebral disc space and fuses the lumbar spine (low back) using a surgical approach from the side (lateral) rather than from the front (anterior) or the back (posterior). An incision is made in the centre of the back and the muscles divided from the bone on both sides. An X-ray is performed to ensure the correct level. The bone along the back of the spinal cord is removed with a high-speed drill. The ligament compressing the nerve roots is also removed. The fusion procedure may be one of two types:

- Pedicle screw fusion - screws are placed into the bone on each side at the affected levels and joined by rods to provide strength.
- Interbody fusion – the disc material between the vertebrae is removed and an interbody cage and bone graft put in its place. This is usually combined with pedicle screws.

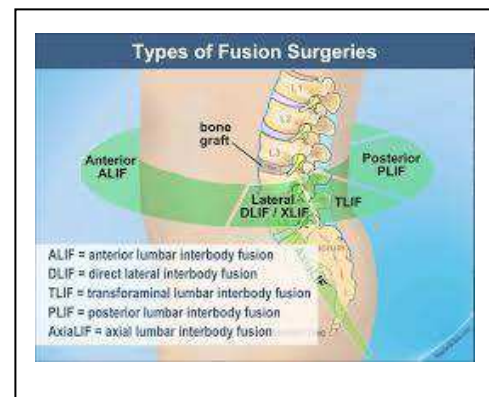


The bone that is removed from the site of surgery is used as bone graft to supplement the fusion. Occasionally if there is not enough bone graft, a substitute will be used as well.

RISKS

Generally, this type of 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%.

The risks involved with posterior lumbar 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.



All surgeries carry risks related to medication, operation or anaesthetic. Risks related to the anaesthetic depend on other medical issues and to the medications used and include heart and lung problems, clots in the lungs or legs etc. and death.

DISCHARGE AND HOME CARE

Patients can go home after being reviewed by the physiotherapist. The patient should be able to drink, eat and have normal bladder/bowel movement prior to discharge. Most patients go home 5 to 7 days after surgery.

In some cases, it is necessary to have some rehabilitation before going home. This will be organized during your hospital stay. It may take weeks to feel normal. Pain can be controlled with tablet pain killers. Any other medications that have been stopped prior to surgery (such as blood thinners) should only be continued after discussion with the surgeon.

Activities such as heavy lifting, bending, twisting moving objects, prolonged sitting or standing should be avoided. Swimming should be avoided for three weeks after surgery. No heavy lifting for 12 weeks.

Patients should not drive if they are taking narcotic pills. They should limit driving to short trips and slowly extend driving time.

Patients may require anywhere between four to six weeks off work (depending on the nature of work).

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.

The wound should heal within two weeks from your surgery. Patients 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, the patient should see their GP immediately.

FOLLOW UP

Dr. Shanu Gambhir would like to see the patient (with x-ray) six weeks after the surgery for a post-operative review.