

Posterior Lumbar Fusion

What is a Lumbar Fusion ?

This is when two or more vertebra are joined with bone fragments, when this sets it fuses.

Why is this usually done ?

Because you are unstable at the level of the surgery.

If you are having surgery at one level could you need to have another done to protect it ?

Yes! Commonly if L4/L5 has to be fused and if there is abnormality at L5/S1 it may need to be included in the fusion.

What are the different ways this can be done.?

1. By a Postero-lateral Fusion (bone around the outside of the spine)
2. By Posterior Interbody Fusion bone +/- cages placed into the disc space from behind
- 3 Instrumented. This is added to either of the above and means the use of screws and rods

How much of the bone is removed ?

This depends, ask your surgeon. Most patients will have a laminectomy as well as the fusion This usually extends from the side of one facet joint to the side of the opposite joint. It is often necessary to remove part of the joints on either side to decompress the nerves. If you are having an instrumented fusion the facets can be completely removed.

Should I have a lumbar fusion for a disc prolapse and sciatica ?

Most surgeons would suggest a microdiscectomy unless you have other problems needing fusion such as a spondylolisthesis.

Where does the bone come from ?

We use the bone that is removed during the laminectomy if you have one. Other bone is taken from the iliac crest (pelvis bone). Sometimes artificial or bovine (cow) bone is used.

What is the risk of failure ?

There are two types of failure.

1. Failure to get better.
2. Failure to fuse.

You can both or either. Some patients will get a solid fusion but get no better and some will have a non solid fusion with good relief of symptoms

Is there a chance of failure at an adjacent level ?

Yes there is no doubt that the adjacent discs to fusion have a greater risk of failure

Can the metal break

Yes This typically occurs if the boney fusion does not work

Will the screws need to be removed

In most cases no. Some patients have the screws or rods pushing on a facet joint and need them taken out.

Is there a chance the fusion will not work ?

Yes! This will depend on lots of factors.

Will the fusion remove all my back pain ?

It may not. It depends on the state of your back and the reasons for your surgery. If you have multiple levels involved and only one fixed then the others may still cause symptoms.

If I have a spondylolisthesis will it be reduced ?

In most cases it will be reduced a certain amount but may not be reduced all the way to normal

Is the a chance of paraplegia ?

Yes

I am having one level done but have problems on my x-rays at other levels should I have these done too ?

No unless the surgeon feels that in doing the surgery at your symptomatic level it will cause problems at the other level fairly soon.

Will I lose mobility in my back ?

If only one level is being fused you may not notice much difference

Could I need further surgery ?

Yes!

Who gets the best results from a fusion?

Those who are having surgery for a significant spondylolisthesis and have sciatica.

Do I have to give up smoking ?

Yes bone growth is thought to occur more quickly and besides it causes cancer !

I am over weight will it help to loose weight ?

Excess weight puts strain on the fusion and your risks of the surgery are higher. Some patients find their symptoms resolve with weight loss

Will I have to wear a brace ?

Yes in most cases for 6 weeks to 3 months

Will I need to have cages and screws ?

Most patients who are having surgery for a spondylolisthesis will need to have screws. This is because the facet joints commonly need to be removed. The cages are used for anterior support and are more commonly used in younger patients (older patients have a shrunken disc).

Could I be worse after the surgery ?

Yes! All the terrible things you hear about spinal surgery going wrong are true !

Will I be able to feel the screws and rods.

No ! Not unless you are very very thin.

What if I get an infection ?

This is treated with a cleaning of the wound and long term antibiotics.

What happens if I get no better with the surgery ?

Spinal fusion is regarded as the last port of call for a surgeon in treating you back. If this does not work there may be little that your surgeon will be able to do for you.

Are the risks of redo (revision) surgery higher than the original surgery ?

Yes! The commonest complication is a tear of the sac around the nerves causing a leak of the fluid called a CSF leak. This will usually settle down over a few days. Because of the scar around the nerve there is a greater risk of nerve injury.

Can I go back to playing active sport ?

In time yes. Most surgeons would suggest avoiding contact sport in the recovery period.