

Lateral interbody fusion in the lumbar spine for low back pain

Information for the public

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What has NICE said?

Lateral interbody fusion in the lumbar spine for low back pain works well enough for use in the NHS. The evidence about how safe it is shows that there are serious but well-recognised complications.

What does this mean for me?

Your health professional should fully explain what is involved in having this procedure, and discuss the possible benefits and risks with you. You should also be told how to find more information about the procedure. All of this should happen before you decide whether you want to have this procedure or not.

NICE is asking health professionals to send information about everyone who has the procedure and what happens to them afterwards to a database at the British Spine Registry.

Other comments from NICE

NICE said that there are several different ways to do this procedure, which all have different risks, including the possibility of damage to major blood vessels. Nerve monitoring is being used more often to reduce the risk of nerve damage. The procedure may be used for other conditions, for example, back pain with sciatica.

Your healthcare team

This procedure should only be done by surgeons with training in lateral interbody fusion in the lumbar spine for low back pain. At first, they should do it with another experienced surgeon.

The condition

Chronic low back pain may result from changes in the spine caused by disease, age or injury. Treatments can include painkillers, drugs to reduce inflammation and manual therapy. If these do not work and severe pain stops the person doing their normal activities, surgery may be an option. Surgery may involve fixing parts of the spine (vertebrae) together, or inserting an artificial disc.

NICE has looked at using [lateral interbody fusion in the lumbar spine](#) as another treatment option.

[NHS Choices](#) and [NICE's information for the public on the assessment and management of low back pain and sciatica in over 16s](#) may be a good place to find out more.

The procedure

The procedure is done under a general anaesthetic. The aim is to relieve pain by removing the damaged disc and fixing parts of the spine together.

Using X-ray guidance a probe is inserted through a small cut in the person's side, level with the affected disc. A small cut is also sometimes made in the back so that the probe can be moved into the right place. Instruments inserted around the probe allow removal of the disc that is causing pain. A cage is then inserted to hold the 2 vertebrae in position. A piece of bone (a graft, usually taken from the hip) is placed between the vertebrae, sometimes supported by screws, plates or rods. The procedure can be done at more than 1 place in the spine during the same operation.

It may take a few months for the person to be able to carry out their normal activities again.

Benefits and risks

When NICE looked at the evidence, it decided that there was enough evidence on how well lateral interbody fusion in the lumbar spine works for low back pain and how safe it is. The 10 studies that NICE looked at involved about 9,700 patients.

Generally, they showed the following benefits:

- improvement in low back pain and leg pain 12 months after the procedure
- less disability and better quality of life
- most patients (80% or more) were happy with the outcome of their procedure.

The studies showed that the risks of lateral interbody fusion in the lumbar spine included:

- problems with nerve function in up to 31% of patients, most of these were temporary
- problems affecting the digestive system in up to 7% of patients
- problems with the cage supporting the vertebrae, or the bone graft, in up to 3% of patients
- pain caused by damaged nerves in up to 5% of patients
- infection or bleeding within the tissues in less than 1% of patients
- temporary nerve injury, damage to blood vessels, urinary tract infection, urinary retention and vertebral fracture, each in up to 1% of patients.

Another operation was needed in up to 6% of patients.

NICE was also told about another possible risk: spinal cord injury.

If you want to know more about the studies, see the [guidance](#). Ask your health professional to explain anything you don't understand.

Questions to ask your health professional

- What does the procedure involve?
- What are the benefits I might get?
- How good are my chances of getting those benefits? Could having the procedure make me feel worse?
- Are there alternative procedures?
- What are the risks of the procedure?
- Are the risks minor or serious? How likely are they to happen?
- What care will I need after the procedure?
- What happens if something goes wrong?
- What may happen if I don't have the procedure?

About this information

NICE [interventional procedures guidance](#) advises the NHS on the safety of a procedure and how well it works.

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Accreditation

