

Understanding NICE guidance

Information for people who use NHS services

Keyhole treatment of a prolapsed (slipped) lumbar disc by endoscope-guided laser

NICE 'interventional procedures guidance' advises the NHS on when and how new procedures can be used in clinical practice.

This leaflet is about when and how endoscope-guided laser can be used in the NHS to treat people with a prolapsed (slipped) lumbar disc. It explains guidance (advice) from NICE (the National Institute for Health and Clinical Excellence).

Interventional procedures guidance makes recommendations on the safety of a procedure and how well it works. An interventional procedure is a test, treatment or surgery that involves a cut or puncture of the skin, or an endoscope to look inside the body, or energy sources such as X-rays, heat or ultrasound. The guidance does not cover whether or not the NHS should fund a procedure. Decisions about funding are taken by local NHS bodies (primary care trusts and hospital trusts) after considering how well the procedure works and whether it represents value for money for the NHS.

NICE has produced this guidance because the procedure is quite new. This means that there is not a lot of information yet about how well it works, how safe it is and which patients will benefit most from it.

This leaflet is written to help people who have been offered this procedure to decide whether to agree (consent) to it or not. It does not describe prolapsed discs or the procedure in detail – a member of your healthcare team should also give you full information and advice about these. The leaflet includes some questions you may want to ask your doctor to help you reach a decision. Some sources of further information and support are on the back page.

What has NICE said?

There is not much good evidence about how well this procedure works or how safe it is. If a doctor wants to use this procedure for a prolapsed disc, they should make sure that extra steps are taken to explain the uncertainty about how well it works and potential risks of the procedure. This should happen before the patient agrees (or doesn't agree) to the procedure. The patient should be given this leaflet and other written information as part of the discussion. There should also be special arrangements for monitoring what happens to the patient after the procedure.

Only surgeons with special training in using lasers and in using an endoscope (a thin, flexible telescope) in the spinal canal should carry out this procedure.

NICE has also encouraged further research into keyhole treatment of a prolapsed (slipped) lumbar disc by endoscope-guided laser and may review the procedure if more evidence becomes available. NICE has said research studies should provide information on what happens to patients who have this procedure in the long term.

Other comments from NICE

It is unclear from the evidence to what extent laser was used instead of or as well as mechanical methods of removing prolapsed disc material.

Keyhole treatment of a prolapsed (slipped) lumbar disc by endoscope-guided laser

This procedure may not be the only possible treatment for a prolapsed disc. Your healthcare team should talk to you about whether it is suitable for you and about any other treatment options available.

The medical name for this procedure is 'Percutaneous endoscopic laser lumbar discectomy'. 'Percutaneous' means through the skin, 'lumbar' means the lower back, and a 'discectomy' is an operation to remove part or all of a disc in the spine.

The procedure is not described in detail here – please talk to your spinal surgeon for a full description.

If the tough outer cover of one of the discs that act as cushions between the bones of the spine (the vertebrae) is damaged or weakened, the jelly-like material inside can bulge outwards. This is a prolapsed disc. If it presses on a nerve it can cause pain, numbness or weakness in the leg or even problems with the bladder.

Most people recover without an operation. They may be offered painkillers or exercises to treat the pain. But if it remains severe for a long time, or there are nerve problems, they may be offered an operation. There are several types, including conventional surgery to remove part or all of the affected disc.

This procedure may be carried out with the patient under local or general anaesthetic. A small cut is made in the back to insert the endoscope so the surgeon can see the disc. A laser is used to remove part of the disc so that it no longer presses on the nerve. Cutting instruments may also be used.

What does this mean for me?

If your doctor has offered you keyhole treatment of a prolapsed (slipped) lumbar disc by endoscope-guided laser, he or she should tell you that NICE has decided that the benefits and risks are uncertain. This does not mean that the procedure should not be done, but that your doctor should fully explain what is involved. You should only be asked if you want to agree to this procedure after this discussion. You should be given written information, including this leaflet, and be able to discuss it with your doctor before you decide. NICE has also decided that more information is needed about this procedure. Your doctor may ask you if details of your procedure can be used to help collect more information about it. Your doctor will give you more information about this.

You may want to ask the questions below

- 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 operation?
- What happens if something goes wrong?
- What may happen if I don't have the procedure?

Summary of possible benefits and risks

Some of the benefits and risks seen in the studies considered by NICE are briefly described below. NICE looked at three studies on this procedure.

How well does the procedure work?

In a study of 300 patients, 194 returned to work and could move around better 6 months after the procedure, and 101 needed less pain medication.

In another study, 67 patients took on average 7 weeks to go back to work. Their pain and ability to function was significantly better 18 months after the procedure.

In another study of 43 patients who had already had conventional surgery for a prolapsed disc, 12 had less pain and functioned better after an average of 31 months.

As well as looking at these studies, NICE also asked expert advisers for their views. These advisers are clinical specialists in this field of medicine. They said that the main things that showed the procedure has worked include pain relief, whether the pain comes back and whether the patient can return to work.

You might decide to have this procedure, to have a different procedure, or not to have a procedure at all.

Risks and possible problems

In all three studies, 9 patients out of 410 needed another operation after the procedure.

In one study 15 out of 300 patients developed pain or tenderness away from the surgery site within 7 days of leaving hospital. In the study of 67 patients, 2 had the layer surrounding the spinal cord damaged during the procedure, which meant some of the fluid inside leaked out. They did not need another operation.

In two studies of a total of 110 patients, 11 felt abnormal sensations in their body (dysaesthesia).

As well as looking at these studies, NICE also asked expert advisers for their views. These advisers are clinical specialists in this field of medicine. They said there is a higher risk of injury to the nerve or to the layer surrounding the spinal cord with this procedure than the open operation because it's harder for surgeons to see what they're doing, and fragments may be left behind. One expert adviser said that when this procedure is carried out at the same time as a similar one called foraminoplasty, there has been heat damage to the nerves that leave the bottom of the spinal cord (cauda equina).

More information about prolapsed discs

NHS Choices (www.nhs.uk) may be a good place to find out more. Your local patient advice and liaison service (usually known as PALS) may also be able to give you further information and support.

About NICE

NICE produces guidance (advice) for the NHS about preventing, diagnosing and treating different medical conditions. The guidance is written by independent experts including healthcare professionals and people representing patients and carers. They consider how well an interventional procedure works and how safe it is, and ask the opinions of expert advisers. Interventional procedures guidance applies to the whole of the NHS in England, Wales, Scotland and Northern Ireland. Staff working in the NHS are expected to follow this guidance.

To find out more about NICE, its work and how it reaches decisions, see www.nice.org.uk/aboutguidance

This leaflet is about 'Percutaneous endoscopic laser lumbar discectomy'. This leaflet and the full guidance aimed at healthcare professionals are available at www.nice.org.uk/IPG300

You can order printed copies of this leaflet from NICE publications (phone 0845 003 7783 or email publications@nice.org.uk and quote reference N1870). The NICE website has a screen reader service called Browsealoud, which allows you to listen to our guidance. Click on the Browsealoud logo on the NICE website to use this service.

We encourage voluntary organisations, NHS organisations and clinicians to use text from this booklet in their own information about this procedure.