

Inserting an implant into a torn disc after surgery for a slipped disc in the lower spine

Information for the public

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What has NICE said?

There is not much good evidence about how well this procedure works or how safe it is. It should only be used if extra care is taken to explain the risks and extra steps are put in place to record and review what happens.

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. In particular, they should explain the uncertainty about the evidence on how likely it is to improve your symptoms and on possible side effects. You should also be told how to find more information about the procedure. You should only be asked if you want to agree to this procedure after having this discussion.

More research on this procedure is needed and NICE may look at it again if more evidence is published. 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](#), so that the safety of the procedure and how well it works can be checked over time. Your health professional should ask you if details of your procedure can be collected.

The condition

If the tough outer cover of a disc that acts as a cushion between 2 bones in the lower part of spine (the lumbar vertebrae) tears, the soft centre can bulge through the tear. This is a slipped (herniated or prolapsed) disc. If it presses on a nerve, the slipped disc can cause pain in the back or legs, numbness or weakness in the legs, or even problems with the bladder.

Treatments include painkillers, drugs to reduce inflammation, corticosteroid injections into the affected area and physical therapy. If the symptoms are severe or long lasting, the bulging material may be removed, either by open surgery or using minimally invasive techniques. This is called discectomy. But usually nothing is done to repair the tear. So, over time, more of the soft centre may bulge through, leading to recurring symptoms and loss of disc height.

NICE has looked at [inserting an annular disc implant](#) after discectomy in the lower spine as a treatment option to close the tear.

NHS Choices (www.nhs.uk) may be a good place to find out more.

The procedure

Inserting an implant (called an annular disc implant) involves closing the hole that is left in a torn disc after any bulging material has been removed during surgery. Typically, the implant used to close the hole is made of a metallic part that is inserted into the bone next to the torn disc and a mesh part made of woven plastic-like material that is inserted into the tear. You will be given a general anaesthetic. A type of X-ray, fluoroscopy, may be used during the procedure to help the surgeon put the implant in the correct place.

Benefits and risks

NICE decided that there is not much good evidence about how well this procedure works or how safe it is. The 5 studies that NICE looked at involved a total of 332 patients.

Generally, they showed the following **benefits**:

- no return of the slipped disc within 2 years after surgery
- reduced disability 6 weeks after surgery, still seen after 2 years
- less back and leg pain than before the procedure, still seen after 2 years

- less height loss in the disc 1 year after surgery.

The studies showed that the risks of inserting an implant after discectomy in the lower spine included:

- a tear in the outer cover of the spinal cord in 1 patient; this could potentially lead to complications such as headache or infection because of fluid leaking out of the central nervous system
- suspected infection of the disc 56 days after surgery in 1 patient, which was successfully treated with antibiotics
- further operations needed in 3 patients: 2 because of the slipped disc coming back and 1 because of excessive scar tissue.

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

