

Treating simple kidney cysts with laparoscopic deroofing

NICE 'interventional procedures guidance' advises the NHS on when and how new surgical procedures or procedures that use electromagnetic radiation (such as X-rays, lasers and gamma rays) can be used.

This leaflet is about when and how laparoscopic deroofing can be used to treat people with simple kidney cysts in the NHS in England, Wales, Scotland and Northern Ireland. It explains guidance (advice) from NICE (the National Institute for Health and Clinical Excellence).

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 simple kidney cysts 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.

Interventional procedures guidance makes recommendations on the safety of a procedure and how well it works. 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.



What has NICE said?

This procedure can be offered routinely as a treatment option for people with simple kidney cysts provided that doctors are sure that:

- the patient understands what is involved and agrees to the treatment, and
- the results of the procedure are monitored.

Most kidney cysts do not cause any symptoms. Doctors should only carry out this procedure if the cysts are causing symptoms, and if they think the procedure is likely to relieve these symptoms.

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

Laparoscopic deroofing of simple kidney cysts

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

A kidney cyst is a fluid-filled sac that develops in the kidney. People may have a simple cyst (a single cyst with thin walls) and be unaware of it because it does not cause any symptoms. In other people simple cysts cause pain. Painful cysts can be treated with painkillers, or by draining fluid out of the cyst using a needle. If draining the fluid doesn't work, a procedure called deroofing may be carried out.

In laparoscopic deroofing, the cyst is drained and then part of the cyst wall on the surface of the kidney is removed, allowing the fluid to drain out. A laparoscope is a thin telescope that is inserted through a small cut in the patient's abdomen to allow the surgeon to see the operation. Other small cuts are made so that the area can be inflated with gas, and to allow instruments to be inserted to cut the cyst wall (keyhole surgery). The procedure is carried out under a general anaesthetic.

Deroofing can also be carried out using open surgery instead of a laparoscope.

What does this mean for me?

NICE has said that this procedure is safe enough and works well enough for use in the NHS. If your doctor thinks laparoscopic deroofing is a suitable treatment option for you, he or she should still make sure you understand the benefits and risks before asking you to agree to it.

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?

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

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 eight studies on this procedure.

How well does the procedure work?

One study of patients with painful kidney cysts compared laparoscopic deroofing with draining the cysts using a needle passed through the skin, and followed the patients' progress for an average of about 18 months. The seven patients who had laparoscopic deroofing were pain free, while the pain had come back in all five patients whose cysts were drained.

Five other studies looked at 155 patients who had laparoscopic deroofing. The studies followed patients' progress for different lengths of time. After the procedure most patients no longer had pain: between 100% of patients (after 6 months) and 91% of patients (after about 4 years) were pain free.

Four of these studies showed that in the majority of patients, the cysts did not come back. In the first study of 13 patients, no cysts had come back after 6 months. In 20 out of 23 patients and in 43 out of 45 patients, no cysts had come back after about 3 years. In 29 out of 36 patients, no cysts had come back after about 5–6 years.

Some expert advisers were satisfied with how well the procedure works. Others said that the cysts may refill after laparoscopic deroofing. The expert advisers said that it is important to carry out the procedure only in patients whose cysts cause symptoms.

Risks and possible problems

The possible complications shown by the studies included bleeding, prolonged inactivity of the bowel, infection and leakage of urine.

In four studies involving a total of 91 patients, 4 patients (one patient in each study) had bleeding during or soon after laparoscopic deroofing. One of these patients had to have open surgery.

In a study of nine patients, one patient had a blocked intestine following the procedure. Another study of 24 patients found that 2 patients had wound infection and 1 patient had urine leakage.

The expert advisers said that other possible complications with laparoscopic deroofing include blood in the urine, infection of the kidney or bladder and injury to other organs or blood vessels during the operation.

More information about kidney cysts

Your local Patient Advice and Liaison Service (PALS) may be able to give you further advice 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. 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 and the full guidance aimed at healthcare professionals are available at www.nice.org.uk/IPG226

You can order printed copies of this leaflet from the NHS Response Line (phone 0870 1555 455 and quote reference N1297).

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ISBN: 978-1-4731-9203-4

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