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Understanding NICE guidance

Information for people who use NHS services

National Institute for Health and Clinical Excellence

Laparoscopic insertion of a peritoneal dialysis catheter

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 insertion of a peritoneal dialysis catheter can be used to aid the treatment of people with end-stage renal disease 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 end-stage renal disease, peritoneal dialysis 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 page 6.

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 who require peritoneal dialysis 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.

This procedure may not be the only possible method for insertion of a peritoneal dialysis catheter. Your healthcare team should talk to you about whether it is suitable for you and about any other treatment options available.

Laparoscopic insertion of a peritoneal dialysis catheter

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

Peritoneal dialysis is a method for cleaning the blood of waste products when the kidneys are unable to. It is used to treat patients with end-stage renal disease. Using a peritoneal dialysis catheter (a thin tube), the abdomen is filled with a special type of fluid that cleans the blood before being drained away.

Laparoscopic insertion of a peritoneal dialysis catheter is a procedure to place a tube in the pelvis. This tube allows the dialysis fluid to be introduced and drained from the abdomen. The operation is usually carried out under general anaesthesia. Small cuts are made in the abdomen so that the area can be inflated using a gas and a fine telescope can be inserted so that the surgeon can thread the catheter into the correct position. This is also called ‘keyhole surgery’. It is an alternative to ‘open’ insertion, where the catheter is placed inside the body without the abdomen being inflated or a fine telescope being inserted to help the surgeon see inside the body.

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 nine studies on this procedure.

How well does the procedure work?

In a study of 45 patients, catheters inserted laparoscopically were just as functional as those inserted during an open procedure. Just over half of all catheters were still in use when assessed at an average of 18.5 months after placement.

In three other trials totalling 357 patients, the laparoscopic procedure led to equivalent or better outcomes than the open procedure. In one study, 91% of laparoscopically inserted catheters were still in use at 12 months compared with 71% inserted during an open procedure. The expert advisers had no concerns about how well the procedure works.

Risks and possible problems

As reported by two of the studies, the laparoscopic procedure led to fewer cases of peritonitis (inflammation of the lining of the abdominal cavity) than the open procedure in the short term (4–6 weeks). However, in the only study that looked at long-term data, peritonitis occurred in 16 out of 50 patients who had the laparoscopic procedure (assessed after an average of 26 months) and 13 out of 52 patients who had the open procedure (assessed after an average of 19 months).

In one small study, infections at the exit site (where the tube comes out of the body) were more commonly reported in laparoscopically inserted catheters than openly inserted catheters. In two others, exit site infections were no more frequent with either procedure. In a large series of 148 patients, 26 had either peritonitis or an exit site infection after laparoscopic insertion of a peritoneal dialysis catheter.

The need for repeat surgery to correct faults with the catheter was slightly greater in patients who had the open procedure than those who had the laparoscopic procedure. Leakage of fluid from the catheter occurred in up to 1 in 10 laparoscopic procedures and catheter blockage was recorded in up to one-third. Serious bleeding, either during or after the laparoscopic procedure, was noted in up to 1 in 20 procedures. In one study of 200 patients, no serious bleeding was recorded.

The expert advisers listed other possible problems as bowel perforation, catheter leakage, infection, the catheter moving or becoming blocked, and bleeding. They stated that most of the risks associated with the procedure were applicable to all laparoscopic procedures rather than this particular intervention alone and that most of the potential adverse events would also occur with the open procedure for catheter insertion.

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 insertion of a peritoneal dialysis catheter as part of your treatment for end-stage renal disease 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?

More information about end-stage renal disease requiring peritoneal dialysis

NHS Direct online (www.nhsdirect.nhs.uk) may be a good starting point for finding out more. Your local Patient Advice and Liaison Service (PALS) may also 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/IPG208

You can order printed copies of this leaflet from the NHS Response Line (phone 0870 1555 455 and quote reference N1206).

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