

National Institute for Clinical Excellence

# Laparoscopic surgery for inguinal hernia repair

Understanding NICE guidance – information for people with inguinal hernia, their families and carers, and the public

September 2004



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#### To order copies

Copies of this booklet can be ordered from the NHS Response Line; telephone 0870 1555 455 and quote reference number N0610. A version in Welsh and English is also available, reference number N0611. Mae fersiwn yn Gymraeg ac yn Saesneg ar gael hefyd, rhif cyfeirnod N0611. The NICE technology appraisal on which this information is based, Laparoscopic surgery for inguinal hernia repair, is available from the NICE website (www.nice.org.uk). A short version of the guidance (a 'quick reference guide') is available from the website (www.nice.org.uk/TA083quickrefguide), or from the NHS Response Line, reference number N0609.

### National Institute for Clinical Excellence

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## What is NICE guidance?

The National Institute for Clinical Excellence (NICE) is part of the NHS. It produces guidance (recommendations) on the use of medicines, medical equipment, diagnostic tests and clinical and surgical procedures within the NHS in England and Wales.

To produce this guidance, NICE looks at how well the medicine, equipment or procedure works and also how well it works in relation to how much it costs. This process is called an appraisal. The appraisal process involves the manufacturer of the medicine or equipment for which guidance is being produced and the organisations that represent the healthcare professionals, patients and carers who will be affected by the guidance.

NICE was asked to look at the available evidence on the use of laparoscopic surgery for inguinal hernia repair. NICE was asked to provide guidance that will help the NHS in England and Wales decide when laparoscopic surgery should be used.

## What is an inguinal hernia?

A hernia occurs when part of an organ moves out of its normal position through a weakness in the surrounding wall of muscle or tissue. When this happens in the groin, it is called an inguinal hernia. The internal lining of the abdomen (called the peritoneum) bulges through a weakness in the abdominal wall in the groin. The bulge often contains parts of the intestine (or bowel). From the outside it usually appears as a lump, and can cause discomfort. An inguinal hernia may limit day-to-day activities and the person's ability to work. These hernias can occasionally be life-threatening if the bowel within the lump becomes obstructed (known as a strangulated hernia).

Most inguinal hernias happen in men (98 out of 100 people who develop a hernia in their groin are male). As many as 3 out of 10 people who get a hernia on one side of their groin will go on to develop a second hernia on the opposite side.

The most common way to repair an inguinal hernia is through 'open' surgery, where a cut is made in the muscular wall of the patient's abdomen. The hernia is usually repaired using a special mesh to reinforce the weakened muscle.

# What is laparoscopic surgery for inguinal hernia repair?

Laparoscopic surgery is often referred to as 'keyhole' surgery. Unlike 'open' surgery, the hernia is repaired through a few small incisions instead of making a large incision in the muscular wall of the abdomen.

Very small cuts are made in the patient's abdomen and a fine flexible telescope (a laparoscope) and other specialised instruments are inserted through these cuts. Usually, a piece of synthetic mesh is used to close the hernia and stop the intestine pushing through the muscle wall again.

The surgeon can get access to the hernia in two main ways.

 Transabdominal preperitoneal (TAPP) hernia repair is performed through the abdominal cavity. Instruments are inserted through the abdominal wall and through the membrane that lines it (called the peritoneum) that encloses the abdominal organs. A flap of the peritoneum is peeled back over the hernia, and mesh is used to cover the problem area in the abdominal wall. The flap is then replaced and the instruments are removed.  The totally extraperitoneal (TEP) approach is the newest keyhole technique. In this method, the hernia is repaired without entering the peritoneal cavity. This approach is more difficult to do, but there may be less risk of damaging organs in the abdomen.

# What has NICE recommended on laparoscopic surgery for inguinal hernia repair?

During the appraisal, NICE's Appraisal Committee read and heard evidence from:

- good-quality studies of laparoscopic surgery for inguinal hernia repair
- doctors with specialist knowledge of inguinal hernia and its treatment
- individuals with specialist knowledge of the issues affecting people with inguinal hernia
- organisations representing the views of people who will be affected by the guidance (because they have, or care for someone with, the condition or because they work in the NHS and are involved in providing care for people with the condition)

 the manufacturers of prosthetic meshes and laparoscopic instruments.

The evidence is summarised in the full guidance (see end for details). More information about the studies is provided in the assessment report for this appraisal (see end for details).

NICE has made the following recommendations about the use of laparoscopic surgery to treat inguinal hernia within the NHS in England and Wales.

Laparoscopic surgery can be used as an option for repairing inguinal hernia. As with all surgery, there are some risks involved, which may include serious problems just after the operation, pain or numbness in the area of the operation, and the hernia coming back. Your doctor should tell you about the risks and benefits of each of the types of surgery (open surgery, or laparoscopic surgery using either the TAPP or TEP methods) before you make a decision on which method to have. In helping you make this decision you and your doctor should particularly consider:

- how well you are likely to cope with a general anaesthetic
- whether this is your first hernia, or whether it has come back or affects both sides of the groin

- whether an open or keyhole operation would work best for your particular hernia
- how much experience the surgeon has in the three techniques.

NICE has also said that laparoscopic surgery for inguinal hernia repair by TAPP or TEP should only be performed by specially trained surgeons who regularly carry out the procedure.

### What should I do next?

If you or someone you care for has an inguinal hernia, you should discuss this guidance with your specialist.

## Will NICE review its guidance?

Yes. The guidance will be reviewed in September 2007.

### **Further information**

The NICE website (www.nice.org.uk) has further information about NICE and the full guidance on laparoscopic surgery for inguinal hernia repair that has been issued to the NHS. The assessment report, which contains details of the studies that were looked at, is also available from the NICE website. A short version of the guidance (a 'quick reference guide') is available on the website and from the NHS Response Line (reference number N0609).

If you have access to the Internet, you can find more information about inguinal hernia on the NHS Direct website (www.nhsdirect.nhs.uk). You can also phone NHS Direct on 0845 4647.



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