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## Quick reference guide

# Laparoscopic surgery for inguinal hernia repair

**NOTE:** This guidance replaces Technology Appraisal Guidance No. 18 issued in January 2001. The Institute reviews each piece of guidance it issues.

The review and re-appraisal of the use of laparoscopic surgery for inguinal hernia repair has resulted in changes in the guidance. Specifically there has been:

- a recommendation that laparoscopic surgery is one of the treatment options for the repair of inguinal hernia
- a recommendation that patients should be fully informed of all the risks and benefits of open and laparoscopic surgery by either the TAPP or TEP approaches, to enable them to choose between the procedures.

## 1 Guidance

1.1 Laparoscopic surgery is recommended as one of the treatment options for the repair of inguinal hernia.

1.2 To enable patients to choose between open and laparoscopic surgery (either by the transabdominal preperitoneal [TAPP] or by the totally extraperitoneal [TEP] procedure), they should be fully informed of all of the risks (for example, immediate serious complications, postoperative pain/numbness and long-term recurrence rates) and benefits associated with each of the three procedures. In particular, the surgeon should consider the following points in discussions with the patient:

- the individual's suitability for general anaesthesia
- the nature of the presenting hernia (that is, primary repair, recurrent hernia or bilateral hernia)
- the suitability of the particular hernia for a laparoscopic or an open approach
- the experience of the surgeon in the three techniques.

1.3 Laparoscopic surgery for inguinal hernia repair by TAPP or TEP should only be performed by appropriately trained surgeons who regularly carry out the procedure.

## 2 Implementation

### 2.1 Implications for the NHS

2.1.1 Approximately 70,000 surgical inguinal hernia repairs are performed in England each year, at a cost to the NHS of £56 million a year. In 2001/02, 95.9% mesh repairs were performed by open surgery, and 4.1% by laparoscopic surgery.

2.1.2 The anticipated costs of adopting laparoscopic surgery are based on the degree of diffusion of this technique. However, experts advised that, for the foreseeable future, it is unlikely that uptake of laparoscopic surgery would exceed 40% of all surgical repairs. If the annual percentage of laparoscopic repairs increased to 20%, the additional cost to the NHS (England) would be approximately £1 million.

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**This guidance is written in the following context:**

This guidance represents the view of the Institute, which was arrived at after careful consideration of the available evidence. Health professionals are expected to take it fully into account when exercising their clinical judgement. This guidance does not, however, override the individual responsibility of health professionals to make appropriate decisions in the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

2.1.3 The cost effectiveness of laparoscopic surgery is influenced by the following.

- The number of laparoscopic procedures performed annually and the surgeon's experience. The duration of laparoscopic surgery decreases as the operating surgeon's experience increases, which should reduce the costs attributable to theatre time. Operating costs for open and laparoscopic repairs done by experienced surgeons are likely to be similar.
- The use of disposable or reusable laparoscopic equipment. Reusable laparoscopic equipment costs about £170 per procedure compared with £790 for disposable equipment.
- The rates of hernia recurrence, serious complications and persistent pain (and its severity).

2.1.4 Regional variations in implementation costs are likely.

## 2.2 Local implementation and audit

- 2.2.1 Surgical services involved in the repair of inguinal hernia should review their current practice and policies to take account of the guidance set out in Section 1. Local guidelines or care pathways for people who undergo surgery for repair of inguinal hernia should incorporate the guidance.
- 2.2.2 Suggestions for audit to measure compliance locally with the guidance are included in the full guidance (see Further information).
- 2.2.3 Further details on criteria for audit are included in the full guidance (see Further information).

### Further information

#### *Distribution*

The distribution list for this quick reference guide is available on the NICE website at [www.nice.org.uk/TA083distributionlist](http://www.nice.org.uk/TA083distributionlist)

#### *Full guidance*

The full guidance is available from [www.nice.org.uk/TA083guidance](http://www.nice.org.uk/TA083guidance)

It contains the following sections: 1 Guidance; 2 Clinical need and practice; 3 The technology; 4 Evidence and interpretation; 5 Recommendations for further research; 6 Implications for the NHS; 7 Implementation and audit; 8 Related guidance; 9 Review of guidance.

The full guidance also gives details of the Appraisal Committee, the sources of evidence considered and suggested criteria for audit.

### *Information for the Public*

NICE has produced information describing this guidance for people with inguinal hernia, their families, and the public. This information is available from the NHS Response Line and from the NICE website.

#### *Related guidance*

The Institute issued the original guidance on the use of laparoscopic repair of inguinal hernia in January 2001.

National Institute for Clinical Excellence (2001) Guidance on the use of laparoscopic surgery for inguinal hernia. *NICE Technology Appraisal Guidance* No. 18. London: National Institute for Clinical Excellence. Available from [www.nice.org.uk/cat.asp?c=20663](http://www.nice.org.uk/cat.asp?c=20663)

### Ordering information

Copies of this quick reference guide can be obtained from the NICE website at [www.nice.org.uk/TA083quickrefguide](http://www.nice.org.uk/TA083quickrefguide) or from the NHS Response Line by telephoning 0870 1555 455 and quoting reference number N0609. 'Information for the public' can be obtained by quoting reference number N0610 for the English version and N0611 for a version in English and Welsh.

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