

NATIONAL INSTITUTE FOR CLINICAL EXCELLENCE

Health Technology Appraisal (Review)

Laparoscopic surgery for inguinal hernia

Scope

Objective: to assess the clinical and cost effectiveness of laparoscopic surgery relative to current standard treatments in the NHS, and to update if and as necessary, guidance issued to the NHS in England and Wales in January 2001¹.

The date set for revision of this guidance to the NHS was August 2003, the point at which the Institute's Guidance Executive will consider an update to the original assessment report. The review date was set on the basis of the Institute's judgement of the pace of change in the evidence base at the time the original guidance was issued. The original guidance will remain in place unless and until any new guidance has been issued. The review will consider whether any new evidence that has become available justifies a change to the original guidance.

Background: An inguinal hernia is a protrusion of a sac of peritoneum (often containing intestine or other abdominal tissue) through a weakness in the abdominal wall in the groin. It usually presents as a lump, with or without some discomfort, which may limit daily activities and the ability to work. Inguinal hernias can occasionally be life-threatening if the bowel within the peritoneal sac strangulates and/or becomes obstructed.

98% of inguinal hernias occur in men, and up to 30% of people who have a unilateral hernia develop a second hernia during their lifetime. The number of finished consultant episodes (a measure of NHS activity) for repairs of either primary or recurrent inguinal hernias in England during 2001/02 was 67,635².

The technology: Surgery is indicated for the repair of inguinal hernias. The most widely adopted technique in the UK is open repair using prosthetic mesh, based on tension-free reinforcement of the posterior wall of the inguinal canal. Laparoscopic methods are also used, allowing hernia repair to be undertaken without the need to open the abdominal wall. As with open techniques, a piece of synthetic mesh is generally used to close the hernia defect. There are two main laparoscopic procedures: Transabdominal preperitoneal (TAPP) repair, which requires access to the peritoneal cavity with placement of mesh through a peritoneal incision, and the totally extraperitoneal (TEP) repair, where the peritoneal cavity is not breached.

Intervention(s)	Laparoscopic surgical techniques, including TAPP and TEP.
Population(s)	People with inguinal hernias requiring surgery.
Current standard treatments (comparators)	Open (mesh) hernia repair
Other considerations	<p>Systematic review based on individual patient data from the EU Hernia Trialists Collaboration and several economic analyses have become available since the last appraisal.</p> <p>Where the evidence base allows, comparison will also be made between TAPP and TEP.</p> <p>Consideration will be given to patients with hernias for whom general anaesthetic is considered clinically inappropriate.</p> <p>Relevant outcome measures include length of operation, recurrence rate, complications, length of hospital stay, time to return to usual activity, post-operative and long-term pain (or numbness), and quality of life.</p>
Current NICE Guidance¹	<p>The guidance from the Institute recommends that:</p> <ul style="list-style-type: none"> • For repair of primary inguinal hernia, open (mesh) should be the preferred surgical procedure. • For the repair of recurrent and bilateral inguinal hernia, laparoscopic surgery should be considered. • When laparoscopic surgery is undertaken for inguinal hernia, the totally extraperitoneal (TEP) procedure should be preferred. • Laparoscopic surgery for inguinal hernia should only be undertaken in those units with appropriately trained operating teams which regularly undertake these procedures.

¹ *Guidance on the use of laparoscopic surgery for inguinal hernia* (Technology Appraisal Guidance no.18), National Institute for Clinical Excellence, January 2001).

² Hospital Episode Statistics, 2001-02 – available from <http://www.doh.gov.uk/hes/index.html>