NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Technology Appraisals and Guidance Information Services

Static List Review (SLR)

Title and TA publication number of static topic:	**TA83; Laparoscopic surgery for inguinal hernia repair**
Final decision:	It is recommended that the guidance for TA83 remain on the static list.

1. Publication date:	September 2004 (This guidance replaces 'Laparoscopic surgery for hernia' (NICE Technology Appraisal Guidance 18) issued in January 2001).
2. Date added to static list:	January 2011
3. Date the last searches were run:	2010
4. Current 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 following points

	should be considered in discussions between the patient and the surgeon: • 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.
5. Research recommendations from original guidance:	5.1 The Institute recommends that further trials be undertaken to evaluate the utility of individuals undergoing laparoscopic surgery at 1 year and longer follow-up (where possible, up to 25 years) to provide long-term data on the cost effectiveness of this technique. 5.2 The issue of chronic pain and numbness after inguinal hernia repair should be addressed prospectively in future studies, using standard definitions to allow for assessment of the degree of pain. 5.3 It is recommended that a registry be set up to monitor the incidence of serious adverse events (specifically the rates of visceral and vascular injury) associated with laparoscopic hernia repair and recurrence rates.
6. Current cost of technology/ technologies:	Unknown.
7. Cost information from the TA (if available):	“Laparoscopic surgery is associated with additional costs, for the endoscopy system (video unit, monitor, endoscope and CO2 insufflator) and instruments (staplers, diathermy scissors or ports), although these may be reusable. The cost of laparoscopic surgery is highly dependent on whether disposable or reusable equipment is used.”

	Section 4.2.5 and 4.2.6 discusses inputs to the economic model on costs: "4.2.5 Inputs to the economic model on the costs and EQ5D utility estimates for the different health states were based on data from the MRC Laparoscopic Groin Hernia Trial. Theatre costs (£6.40 per minute) and in-hospital costs (£236 per day) were similar for open and laparoscopic procedures. The additional equipment and consumable costs of laparoscopic surgery were £167 per procedure when using predominantly reusable equipment (assuming all reusable devices are used on average 250 times a year for 5 years), or £788 per procedure when predominantly disposable equipment is used. Baseline estimates for operation length, hospital stay, operative mortality, recurrence, re-operation, persistent pain and numbness, time away from usual activities and health state utilities were taken from the best available data identified during this systematic review. Relative differences in the effectiveness of the different methods of open and laparoscopic repair were based on the meta-analysis results for the various outcomes, which were applied to these baseline parameters. Probabilities, costs and utilities were not considered to be fixed but were assigned a probability distribution to reflect uncertainty about their values. The same annual risk of recurrence, pain, numbness and relative effect sizes was used for primary and subsequent procedures. A constant annual risk for persistent pain, numbness and recurrence was assumed when extrapolating from years 6 to 25 of the model. 4.2.6 The results from the model showed that laparoscopic surgery (using reusable equipment) was associated with an increased cost of between £100 and £400 per procedure."
8. Alternative company(ies):	These are additional companies now manufacturing devices used in laparoscopic surgery for hernia repair: Medtronic UK (previously Covidien UK) Ethicon (part of Johnson and Johnson Medical Devices)

	Kebomed UK Cook Medical (UK) Ltd pfm Medical UK Ltd
9. Changes to the original indication:	Not applicable
10. New relevant trials:	Nothing relevant.
11. Relevant NICE guidance (published or in progress):	NICE advice [MIB9] The PolySoft hernia patch used with the ONSTEP technique to treat inguinal hernias Published: August 2014 NICE Guidance Hernia: Diagnosis and management of hernia. Suspended: Following a recent review of current guideline commissioning priorities, NICE has deferred the development of the Hernia clinical guideline in order to prioritise another topic for guideline development (June 2015)
12. Relevant safety issues:	None identified.
13. Technical Lead comments and recommendation:	This review found no further relevant clinical trial evidence regarding laparoscopic surgery for the repair of inguinal hernia. Due to the nature of the procedure and the various costs involved, it is not possible to determine whether there have been changes to the costs since TA83 was issued in this review. However, section 4.2.7 of TA83 states that “sensitivity analysis for differences in the costs, utility and relative effectiveness of different methods of open and laparoscopic repair was undertaken to evaluate the effect of uncertainty in these areas; most of these had little effect on the cost effectiveness of laparoscopic surgery.” Therefore, it is unlikely that any changes to the costs since TA83 was issued would result in a change to the recommendations. Overall, there is currently no evidence to warrant a review proposal for this guidance, and therefore it is recommended that the guidance for TA83 remain on the static list.

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Appendix 1 – explanation of options

Options	Consequence	Selected – 'Yes/No'
The guidance will remain on the 'static guidance list'	The guidance will remain in place, in its current form, unless NICE becomes aware of substantive information which would make it reconsider. Literature searches are carried out every 5 years to check whether any of the Appraisals on the static list should be flagged for review.	Yes
The decision to review the guidance will be deferred to specify date or trial	NICE will consider whether a review is necessary at the specified date. NICE will actively monitor the evidence available to ascertain when a consideration of a review is more suitable.	No
A full consideration of a review will be carried out through the Review Proposal Process	There is evidence that could warrant a review of the guidance. NICE will schedule a consideration of a review, including a consultation with relevant consultees and commentators.	No
The guidance will be withdrawn	The guidance is no longer relevant and an update of the existing recommendations would not add value to the NHS. NICE will schedule a consideration of a review, including a consultation with relevant consultees and commentators.	No
The guidance should be updated in an on-going clinical guideline.	Responsibility for the updating the technology appraisal passes to the NICE Clinical Guidelines programme. Once the guideline is published the technology appraisal will be withdrawn. NICE will schedule a consideration of a review, including a consultation with relevant consultees and commentators.	No