

Executive summary

Laparoscopic Ventral Hernia Repair

(Adapted from the report of the Review Group by Ms Clara Pham)

Background

Ventral hernias are the second most common type of abdominal hernias, after inguinal and account for approximately 10% of all hernias. The open approach is the standard technique for repair of ventral hernias. However, the rate of hernia recurrence is high, especially if the hernia defect has been repaired with sutures. The laparoscopic repair of ventral hernias is an emerging technique which has the potential to replace open repair.

Methods

MEDLINE, EMBASE, Current Contents and PubMed were searched from inception up to January 2004 and The Cochrane Library Issue 1, 2004 was searched for randomised controlled trials (RCTs) comparing laparoscopic ventral hernia repair with open ventral hernia repair. The York (UK) Centre for Reviews and Dissemination databases, Clinicaltrials.gov, National Research Register, relevant online journals and the Internet were searched in January 2004. Studies containing safety and efficacy data on the laparoscopic approach of ventral hernia repair in the form of randomised controlled trials (RCTs) and other controlled or comparative studies were included.

Results

Data from the included studies (two RCTs and eight non-randomised comparative studies) suggest that the laparoscopic approach may have some advantages over open repair. The laparoscopic approach appears to have a lower recurrence rate and require a shorter hospital stay with a rate of conversion to open surgery of 0 to 14%. Complications from the open approach tend to be wound-related, whereas the laparoscopic approach reported wound-related and procedure-related complications. Complications appear to be less frequent in laparoscopic repair.

Conclusion and recommendations

Based on the current level of evidence, the relative safety and efficacy of the laparoscopic approach in comparison with the open approach is still uncertain. However, results from the included studies suggest some advantages for laparoscopic repair over open repair. The laparoscopic approach may be more suitable for straightforward hernias and open repair reserved for the more complex hernias. Laparoscopic ventral hernia repair appears to be an acceptable surgical operation that can be offered by surgeons proficient in advanced laparoscopic techniques.

Review Group Membership

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Important note The information contained in this report is a distillation of the best available evidence located at the time the searches were completed as stated in the protocol. Please consult with your medical practitioner if you have further questions relating to the information provided, as the clinical context may vary from patient to patient.

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