



Title Laparoscopic Ventral Hernia Repair: An Accelerated Systematic Review

Agency ASERNIP-S, Australian Safety and Efficacy Register of New Interventional Procedures

– Surgical

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## Aim

To assess the safety and efficacy of laparoscopic ventral hernia repair in comparison with open ventral hernia repair.

## Conclusion and results

Based on the current level of evidence, the relative safety and efficacy of the laparoscopic approach in comparison with the open approach remains 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.

Data from the included studies – 2 randomized controlled trials (RCTs) and 8 non-randomized 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.

## Methods

Search strategy – MEDLINE, EMBASE, Current Contents, and PubMed were searched from inception to January 2004 and the Cochrane Library Issue I, 2004 was searched for randomized 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.

Study selection - Studies containing safety and efficacy

data on the laparoscopic approach of ventral hernia repair in the form of RCTs and other controlled or comparative studies were included.

Data collection and analysis – Data from the included studies were extracted by the ASERNIP-S researcher using standardized data extraction tables developed a priori. A second researcher checked the data.