Chronic pain 5 years after randomized comparison of laparoscopic and Lichtenstein inguinal hernia repair

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Abstract

Background:

Chronic postoperative pain is a major drawback of inguinal hernia repair. This study compared the frequency of chronic pain after laparoscopic (totally extraperitoneal patch, TEP) and open (Lichtenstein) repairs.

Methods:

A randomized multicentre study with 5 years' follow-up was conducted on men with a primary inguinal hernia. Chronic pain was categorized as mild, moderate or severe by blinded observers. A subgroup analysis was performed on 121 patients who experienced moderate or severe pain at any time during follow-up.

Results:

Overall, 1370 of 1512 randomized patients underwent surgery, 665 in the TEP and 705 in the Lichtenstein group. The total incidence of chronic pain was 11·0 versus 21·7 per cent at 1 year, 11·0 versus 24·8 per cent at 2 years, 9·9 versus 20·2 per cent at 3 years and 9·4 versus 18·8 per cent at 5 years in the TEP and Lichtenstein groups respectively (P < 0·001). After 5 years, 1·9 per cent of patients in the TEP and 3·5 per cent in the Lichtenstein group reported moderate or severe pain (P = 0·092). Of the 121 patients, 72 (59·5 per cent) no longer reported pain a median of 9·4 (range 6·7–10·8) years after operation.

Conclusion:

Five years after surgery only a small proportion of patients still report moderate to severe chronic pain. Laparoscopic inguinal hernia repair leads to less chronic pain than open repair. Registration number: NCT00568269 (http://www.clinicaltrials.gov). Copyright © 2010 British Journal of Surgery Society Ltd. Published by John Wiley & Sons, Ltd.