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 $11\cdot0$ versus $21\cdot7$ per cent at 1 year, $11\cdot0$ versus $24\cdot8$ per cent at 2 years, $9\cdot9$ versus $20\cdot2$ per cent at 3 years and $9\cdot4$ versus $18\cdot8$ per cent at 5 years in the TEP and Lichtenstein groups respectively ($P < 0\cdot001$). After 5 years, $1\cdot9$ per cent of patients in the TEP and $3\cdot5$ per cent in the Lichtenstein group reported moderate or severe pain ($P = 0\cdot092$). Of the 121 patients, 72 ($59\cdot5$ per cent) no longer reported pain a median of $9\cdot4$ (range $6\cdot7-10\cdot8$) 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.