

Clinical outcome and quality of life in 100 consecutive laparoscopic totally extra-peritoneal (TEP) groin hernia repairs using fibrin glue (TisseelTM): a United Kingdom experience.

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Abstract:

PURPOSE: The use of fibrin sealant (FS) (TisseelTM) for mesh fixation in patients undergoing laparoscopic groin hernia surgery is a well-recognised technique in Europe, but no study to date has examined effect on quality of life (QoL) on patients undergoing FS mesh fixation. A prospective study was therefore conducted to examine the effects on QoL of patients undergoing laparoscopic groin hernia surgery using FS in the United Kingdom.

MATERIALS AND METHODS: Between March 2007 and January 2011, all patients undergoing laparoscopic total extra preperitoneal (TEP) groin hernia repair using FS were included in the study. A validated hernia questionnaire from The Royal College of Surgeons of England supplemented by the EORTC QLQ C-30 to assess the pre- and postoperative QoL, pain scores and health outcome measures was used. All the patient's demographics, duration of surgery, size of hernia, recurrence, morbidity and hospital stay were recorded.

RESULTS: Data from 92 patients (87 males and 5 females) with a median age of 46 years (range, 19-82 years) was collected for the study (response rate of 92/121, 73 %). A total of 58 patients (63 %) had a unilateral and 34 patients (37 %) a bilateral hernia repair, of which 6 (7 %) were recurrent inguinal hernia. The mean operating time for a unilateral hernia was 36 min (30-62), and that for a bilateral hernia was 59 min (51-83). There were no conversions to open surgery out of the 92

patients included with the recorded morbidity of 7 %. There were no early recurrences. Eighty-nine patients (98 %) of patients were discharged in the first 24 h after surgery. There was a significant statistical difference recorded in patients visual analogue pain score (VAS 0-10) before and after surgery ($P < 0.0001$, Mann-Whitney U test). The physical, emotional, social and health components of the questionnaire were statistically significant pre- and postoperatively ($P < 0.001$ Mann-Whitney U test).

CONCLUSION: Groin hernia TEP repair with FS fixation did not have a detrimental effect on QoL and pain scores. In addition, the low early recurrence rate provided good evidence of the mesh fixation properties of FS. FS can therefore be continued to be recommended, as an alternative fixation method in laparoscopic groin hernia surgery.