Randomized double-blinded prospective trial of fibrin sealant spray versus mechanical stapling in laparoscopic total extraperitoneal hernioplasty.[Erratum appears in Ann Surg. 2014 Aug;260(2):408 Note: Melissa, Chan Shannon [corrected to Chan, Melissa Shannon]; Bun, Teoh Anthony Yuen [corrected to Teoh, Anthony Yuen Bun]; Wing, Chan Kin [corrected to Chan, Kin Wing]; Chung, Tang Yiu [corrected to Tang, Yiu Chung]; Tat, Leong Heng [corrected to Leong, Heng Tat]]

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Abstract:

OBJECTIVE: The aim of the current study was to compare the clinical outcomes of mesh fixation with fibrin sealant (FS) spray or mechanical stapling (MS) in laparoscopic total extraperitoneal hernioplasty (TEP).

BACKGROUND: The most appropriate method of mesh fixation is uncertain.

METHODS: Between June 2007 and June 2011, consecutive patients with primary reducible unilateral inguinal hernia who underwent day-case laparoscopic TEP were recruited. Outcome parameters included the incidence of acute and chronic pain, recurrence rates, morbidity rates, analgesic requirements, quality-of-life (QOL) scores, and direct cost.

RESULTS: During the study period, 130 patients were included in the study. Patients in the MS group had significantly worse pain scores on the day after operation (P = 0.006). Analgesic

requirements were similar between the 2 groups (P = 0.558). At 6 months, no significant differences in the incidence of chronic pain were observed (at rest, after coughing or cycling). The incidence of seroma formation was similar between the 2 groups (P = 0.64), and no recurrences were observed at 1 year. No differences in the QOL scores were detected. The direct cost of the entire hospitalization in the FS group was less expensive (P < 0.001).

CONCLUSIONS: FS and MS are both effective methods of providing mesh fixation. FS was associated with reduced acute pain but not chronic pain. The rates of seroma formation were similar. However, the use of FS for mesh fixation was less expensive. [corrected].