Less chronic pain following mesh fixation using a fibrin sealant in TEP inguinal hernia repair.

Authors: Schwab R, Willms A, Kroger A, Becker HP

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Abstract:

Endoscopic hernia repair methods have become increasingly popular over the past 15 years. The postulated main advantages of the endoscopic technique are less postoperative pain, early recovery and lower recurrence rates. Fixation of the endoscopic mesh seems to be necessary to minimize the risk of recurrence. Stapling has been implicated to cause chronic inguinal pain syndromes. We performed a retrospective study on male patients who were endoscopically operated on primary inguinal hernias. Our aim was to clarify whether mesh fixation using a fibrin sealant is as safe and reliable as conventional stapling. Additionally, we compared the prevalence of chronic inguinal pain. A standardized population of 133 male patients (mean age 55.9 years) with 186 (80 unilateral; 53 bilateral) consecutive primary laparoscopic total extraperitoneal inguinal hernia repairs was assigned to two groups, depending on whether stapling or a fibrin sealant had been used for mesh fixation. A retrospective case control study was performed to conduct statistical analysis based on the following parameters: recurrence, complications, chronic inguinal pain, foreign body sensation and numbness. Hernia repairs numbering 173 (staples n=87; fibrin n=86) were followed up for a mean duration of 23.7 (11-47) months. The prevalence of chronic inguinal pain was significantly (P=0.002; Fisher exact test) higher in the stapled group-20.7% than in the fibrin sealant group with a prevalence of 4.7%. In terms of recurrence rate, complications and foreign body sensation, fewer patients were affected in the fibrin group than in the reference population, although the differences were not statistically significant. There were no major complications in either of the groups. The mean postoperative stay in hospital was 1.4 days. Fibrin sealing is as effective as stapling in providing

secure mesh fixation. The fibrin group displayed a statistically significant lower prevalence of chronic pain syndromes. Mesh sealing provides adequate fixation and reduces the risk of chronic inguinal pain as a complication of the intervention.