

## AB103. Tacking versus no tacking in laparoscopic totally extraperitoneal repair of primary inguinal hernia: a systematic review and meta-analysis of randomised controlled trials

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**Background:** The necessity of mesh fixation in laparoscopic totally extraperitoneal (TEP) inguinal hernia repair remains controversial. We performed a systematic review and meta-analysis to compare the effectiveness of mesh tacking versus no tacking in laparoscopic TEP repair for primary inguinal hernia.

**Methods:** PubMed, EMBASE and Cochrane databases were searched for relevant articles from inception until November 2019. All trials that compared tacking versus no tacking in TEP repairs for inguinal herniae were included. Recurrent and femoral herniae were excluded

from the current analysis. The primary outcome measure was recurrence, while secondary outcomes included postoperative pain scores at discharge and at 1 month, mean operative time, length of stay and seroma rates. Random effects models were used to calculate pooled effect size estimates.

**Results:** Eight randomised controlled trials were included capturing 557 patients and 715 inguinal herniae. On random effects analysis, there were no significant differences between tacking and no tacking in terms of recurrence (OR 0.94, 95% CI: 0.10 to 9.28, P=0.96), postoperative pain scores on discharge (mean difference 0.82, 95% CI: -0.35 to 2.00, P=0.17) or at 1 month (mean difference 0.53, 95% CI: -0.75 to 1.82, P=0.41), mean operative time (mean difference 1.58 mins, 95% CI: -0.22 to 3.37, P=0.09), seroma (OR 0.70, 95% CI: 0.28 to 1.74, P=0.44) or length of stay (mean difference 0.11 days, 95% CI: -0.04 to 0.25, P=0.14).

**Conclusions:** Mesh tacking in laparoscopic TEP repair for primary inguinal herniae does not translate into improved postoperative outcomes and may be omitted.

**Keywords:** Extraperitoneal; inguinal; laparoscopic; mesh; tacking

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