

AB052. Fistulotomy with or without marsupialization for simple fistula-in-ano—a systematic review and meta-analysis

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Background: Marsupialization of wound edges after anal fistulotomy results in a smaller raw surface area and may improve postoperative outcomes. However, it remains an uncommon practice. We performed a systematic review and meta-analysis to evaluate the effectiveness of marsupialization in fistulotomy for simple fistula-in-ano.

Methods: PubMed, EMBASE and Cochrane databases were searched for relevant articles from inception until November 2019. All trials that reported on marsupialization in anal fistulotomy were included. The primary outcome measure was time to complete healing, while secondary outcomes included recurrence and incontinence rates. The difference in pain scores between the two cohorts could not

be evaluated as they were assessed at different time points across the studies. Random effects models were used to calculate pooled effect size estimates.

Results: Four randomised controlled trials were included capturing 259 patients. The mean (standard deviation) age of the cohort without marsupialization was 40.65 (9.23), whilst the one undergoing marsupialization was 42.1 (8.28), years. There were 211 males (81.5%) and 48 females (18.5%). On random effects analysis, marsupialization was associated with a significantly shorter time to healing compared to no marsupialization (mean difference -2.74 weeks, 95% CI: -5.09 to -0.39 , $P=0.02$). However, there was no difference in recurrence (RR =0.44, 95% CI: 0.07 to 2.91, $P=0.39$) or incontinence (RR =0.45, 95% CI: 0.13 to 1.60, $P=0.22$) rates.

Conclusions: Marsupialization of anal fistulotomy wounds is associated with a significantly shorter healing time, but similar recurrence and incontinence rates, compared to omitting marsupialization.

Keywords: Marsupialization; fistulotomy; fistula-in-ano; healing; incontinence; recurrence

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