

## AB043. 222. Evaluation of the effects of negative pressure dressings on wound complication rates following stoma reversal

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**Background:** Stoma closure is associated with a high rate of surgical site infection (SSI). Purse-string closure has been shown to result in lower SSIs but potential additional benefits of negative pressure dressing application are understudied. The aim of this study was to assess the overall complication rate, wound infection, time to wound healing and frequency of outpatient attendance after stoma reversal surgery and influence of dressing types on these factors.

**Methods:** A retrospective analysis was done of all reversal of stoma using purse-string closure from July 2016 to November 2018. PICO and NANOVA were used as

negative pressure dressings (NPD). Complication rate, SSI rate and frequency of dressing clinic attendance post-op was assessed and compared between colostomy versus ileostomy and conventional dressing versus NPD.

**Results:** In total, 84 patients had stoma reversal surgery in the period. 68 were ileostomy reversal. The median age was 60.5 years (range, 21–87 years); 41 (48.8%) patients had negative pressure dressings, 43 (51.2%) had betadine wick dressing. SSI rate was higher in colostomy reversal versus ileostomy (6/68 *vs.* 3/16). There was no significant difference in wound infection rates in ileostomy reversal with NPD versus conventional dressing. Time to wound healing was similar in both groups however NPD group required less dressing clinic follow up (1.87 visits *vs.* 2.16,  $P=0.682$ ).

**Conclusions:** This analysis shows a low rate of overall complication following stoma reversal surgery at our institution. NPD may be useful to reduce point of care visits but did not affect time to wound healing or infection incidence.

**Keywords:** Colostomy; ileostomy; negative-pressure; reversal

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