



## AB124. 34. Is laparoscopic lavage non-inferior to conventional sigmoid resection for perforated purulent diverticulitis?—a meta-analysis

Hena Hidayat<sup>1</sup>, Adeel Zafar Syed<sup>1</sup>, Jean Saunders<sup>2</sup>, J. Calvin Coffey<sup>1</sup>, Eamon Kavanagh<sup>1</sup>

<sup>1</sup>Department of Surgery, University Hospital Limerick, Limerick, Ireland; <sup>2</sup>CSTAR, UL, Limerick, Ireland

**Background:** Formation of a stoma with bowel resection has been the main stay of treatment of peritonitis secondary to diverticular perforation. Laparoscopic lavage has recently emerged as an alternative treatment modality. All the randomized controlled trials (RCTs) conducted on the use of laparoscopic lavage to date has shown contradictory results and the non-inferiority of laparoscopic lavage to surgical resection remains debatable. The objective was to assess the efficacy and safety of laparoscopic lavage in treatment of Hinchey III diverticulitis patients.

**Methods:** Electronic databases such as MEDLINE, EMBASE, Cochrane Database of Systematic Reviews and the Cochrane Central Register of Controlled Trials were

searched for relevant RCTs. Meta-analysis was conducted following PRISMA guidelines.

**Results:** Three RCTs involving 315 patients were included in the meta-analysis. Laparoscopic lavage was associated with an increase in severe morbidity at 30 days postoperatively [risk ratio (RR) 1.94, 95% CI, 1.21–3.12, P=0.006], with significantly more intraabdominal abscesses. Occurring in the lavage group (P=0.0006) however it had comparable mortality to resection group. At 12 months, there was a trend towards reduced rate of reoperations and presence of stoma in lavage group but the difference was not statistically significant.

**Conclusions:** In conclusion, laparoscopic lavage was associated with an increase in short term morbidity with comparable mortality rates to colon resection. At 12 months, there was a decrease in the presence of stomas and need for reoperations in the lavage group. Therefore laparoscopic lavage is non-inferior to colon resection in terms of efficacy and safety in the management of Hinchey III patients.

**Keywords:** Diverticulitis; lavage; peritonitis

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