



AB034. SOH23ABS_077. Efferent limb stimulation prior to loop ileostomy closure —a meta-analysis

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Background: Postoperative ileus (POI) remains a common phenomenon following loop ileostomy closure. We aimed to determine whether preoperative physiological stimulation (PPS) of the efferent limb reduced the incidence of POI.

Methods: A PRISMA-compliant meta-analysis searching PubMed, EMBASE and CENTRAL databases from inception till Oct 2022, was performed. All studies comparing PPS versus no stimulation were included. The primary objective was the incidence of POI whereas secondary objectives included the time to resume oral diet, need for nasogastric tube (NGT) placement postoperatively, time to first passage of flatus/stool, length of stay (LOS) and other complications. Random effects models were used to calculate pooled effect size estimates. Sensitivity analyses were also performed.

Results: Four studies (3 randomized, 1 prospective) capturing 293 patients (140 PPS, 153 no-stimulation) were included. The PPS group was associated with a lower POI incidence [10.7% vs. 26.8%, odds ratio (OR) 0.27, 95% CI =0.09–0.86, P=0.03], quicker time to resume oral diet [mean difference (MD) –1.34 days, P=0.02], shorter LOS (MD –1.43 days, P=0.001) and fewer complications (OR 0.37, P=0.008). However, there was no difference in the requirement for NGT placement (OR 0.50, P=0.12) or time to first passage of flatus/stool (MD –0.71 days, P=0.24). On

sensitivity analysis, focusing on randomized data only, the difference observed in POI rates was lost (OR 0.35, P=0.10) whereas the results of the secondary objectives prevailed.

Conclusions: Efferent limb stimulation prior to surgery appears to result in a quicker time to resume oral diet, shorter LOS but similar POI rates. Further studies are needed to confirm those findings.

Keywords: Efferent limb; ileostomy closure; length of stay (LOS); preoperative stimulation; postoperative ileus (POI)

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Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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