

062. Satisfying Outcome of 24-Hours Post Operation Feeding Following Bowel Anastomosis Surgery: A Systematic Review and Meta-Analysis

Angeline Rufina¹, Arif Zuhan²

¹Resident of General Surgery, Faculty of Medicine Mataram University/ West Nusa Tenggara Province General Hospital, Mataram, Indonesia.

²Staff of Surgery Department, Division of Digestive Surgery, Faculty of Medicine Mataram University, Indonesia

ABSTRACT

Background: Gastrointestinal anastomosis surgery does not have standardized postoperative feeding practices. The majority of surgeons used to believe that early enteral feeding (EEF) after bowel resection and anastomosis could be harmful and cause stress on the anastomosis site, increasing the risk of leakage. This study compared EEF patients whose nutrition started for the first 24 hours with delayed enteral feedings (DEF) during bowel anastomosis surgery **Case:** This systematic review and meta-analysis used the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) guidelines. All extracted data was presented in the table, summarized narratively, and analyzed statistically using forest plots through a relative risk (RR) with a fixed effect model test. **Results:** This research included 444 participants from 6 studies, including 196 in the EEF group and 248 in the DEF group. From the analysis, the incidence of leakage, gastrointestinal symptoms of abdominal distention and vomiting, fever, and surgical site infection (SSI) were lower in the EEF group although not significant, with statistical values in order namely; leakage (RR 0.39, $p=0.10$); abdominal distention (RR 0.67, $p=0.11$), vomiting (RR 0.88, $p=0.53$); fever (RR 0.61, $p=0.005$) and SSI (RR 0.42; $p=0.002$). Length of stay (LOS) was found to be statistically significant shortened in the EEF group (Mean Difference 2.23 days; $P < 0.00001$). **Conclusion:** The EEF group had a statistically insignificant lower incidence of leakage, gastrointestinal symptoms, fever, and SSI and statistically significant shorter LOS. Twenty-four hours post-operation enteral feeding showed a satisfactory outcome, so we recommend it in either small or large bowel anastomosis surgery.

Keywords: early enteral feeding, delayed enteral feeding, bowel anastomosis, outcomes.

DOI: <https://doi.org/10.24843/JBN.2024.v08.is02.p062>