

EARLY FEEDING VERSUS STANDARD OF CARE IN COLORECTAL SURGERY: A SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED CLINICAL TRIALS

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INTRODUCTION

- Colorectal surgery can range from minimally invasive outpatient procedures to emergent laparotomies, presenting different degrees of postoperative complications and length of hospital stay (LOS).
- Early feeding (EF) initiation within the first 24 hours postoperatively may provide essential nutritional support to reduce complication rates and LOS.

METHODS

- PubMed, EMBASE, and Cochrane Central databases were searched for randomized clinical trials comparing EF versus standard of care (SC) in colorectal surgery.
- The endpoints of interest were postoperative LOS, nausea, vomiting, time to first stool and flatus, postoperative ileus duration, abdominal distention, need for nasogastric tube, reoperation, wound infection, anastomotic leak, 30-day mortality, and complications measured by a Clavien-Dindo ≥ 3 .
- Risk ratios (RRs), mean differences (MDs), and their 95% confidence intervals (CIs) were computed using a random-effects model. This systematic review and meta-analysis followed Cochrane and PRISMA recommendations.

RESULTS

- We included eight studies, comprising 797 patients. Among these, 397 (49,9%) followed an EF, while 400 (50,1%) received SC.
- EF was associated with a significant decrease in anastomotic leaks (OR 0.38; 95%CI 0.16 to 0.92, $p=0.032$; $I^2=0\%$ - Figure 1), LOS (MD -1.70; 95%CI -2.59 to -0.82; $p<0.001$; $I^2=91\%$ - Figure 2), time to flatus passage (MD -0.089; 95%CI -1.14 to -0.64; $p<0.001$; $I^2=53\%$), time to first stool (MD -1.02; 95%CI -1.34 to -0.70; $p<0.001$; $I^2=56\%$), and length of postoperative ileus (MD -0.97; 95%CI -1.28 to -0.65; $p<0.001$; $I^2=78\%$).
- No statistically significant difference was observed between the EF group and the SC group in terms of mortality, wound infection, nausea and vomiting, abdominal distention, and need for a nasogastric tube.

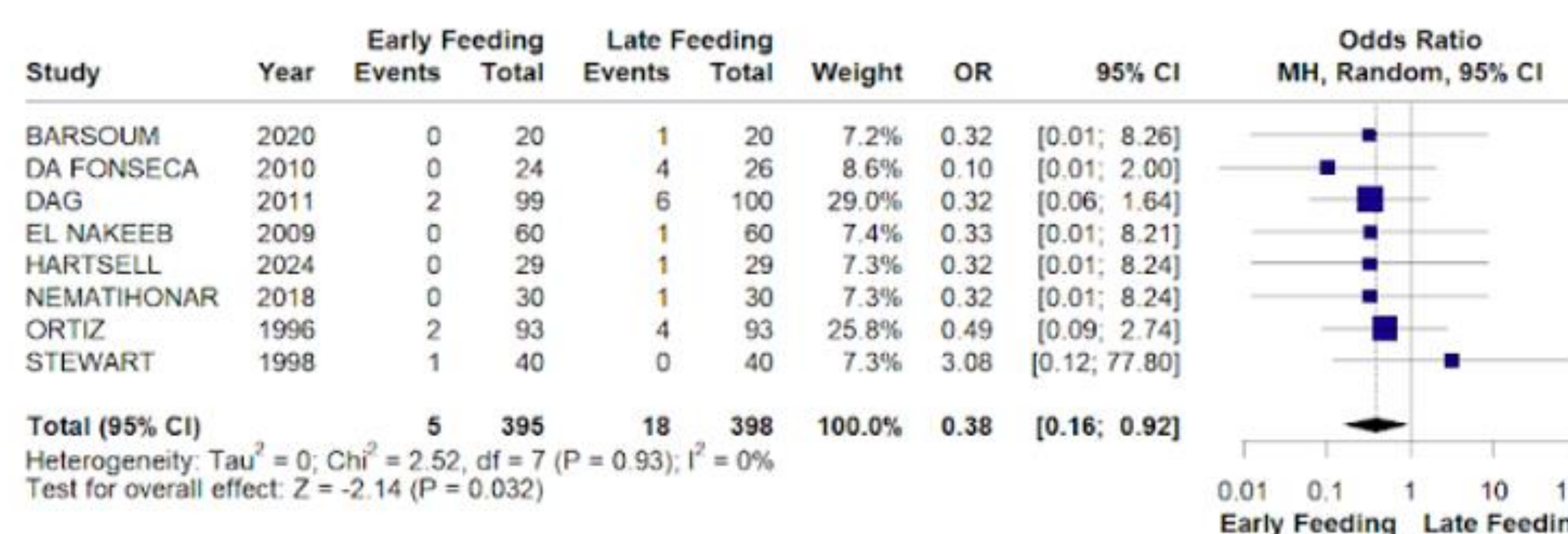


Figure 1. Anastomotic Leak Rate

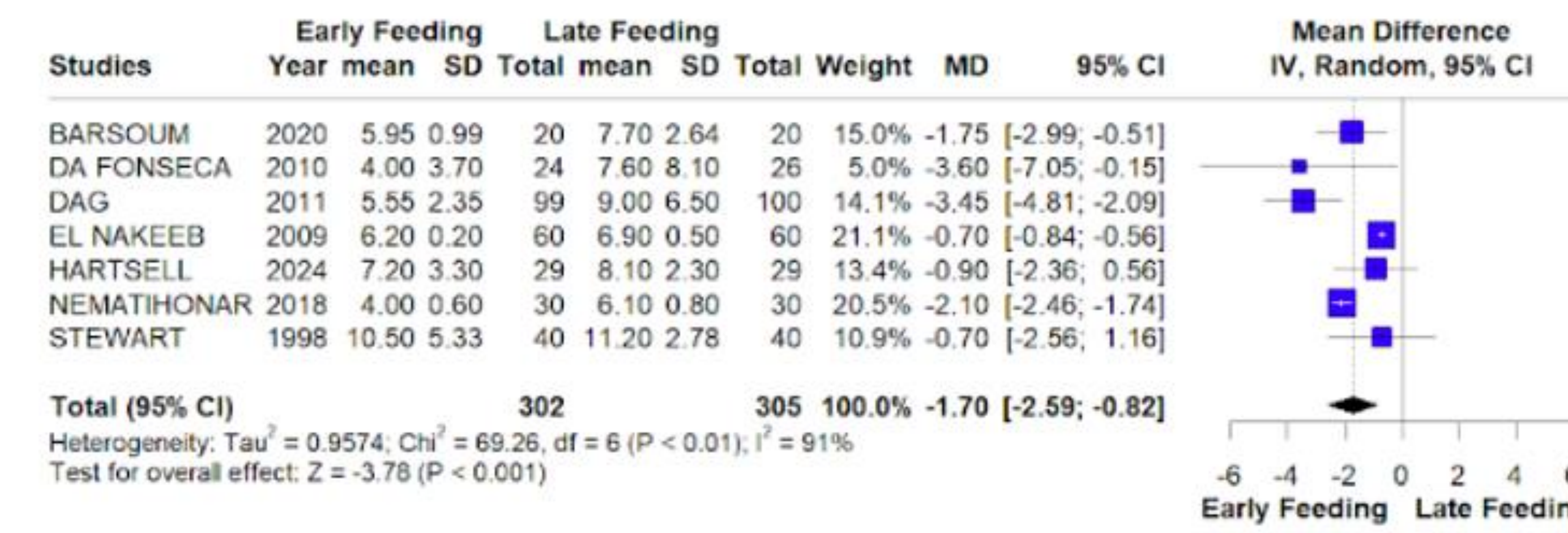


Figure 2. Length of Hospital Stay

CONCLUSION

- Implementing early feeding routinely in colorectal surgeries should be considered as it may reduce time to return of bowel function, incidence of anastomotic leak, and LOS.