

# Early Feeding Versus Delayed Feeding after Therapeutic Endoscopic Intervention in Upper GI Bleeding: A Systematic Review and Meta-analysis

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**Introduction:** Multiple endoscopic interventions are used to treat upper GI bleeding. Early feeding after endoscopic intervention in upper GI bleeding was always thought to be associated with higher mortality rate and worse outcomes.

**Methods:** We performed a comprehensive search in the databases of PubMed/MEDLINE, Embase, and the Cochrane Central Register of Controlled Trials from inception through May 25th, 2022. We considered only randomized controlled trials. The primary outcome was the mortality rate. The secondary outcomes were the occurrence of early bleeding, late bleeding and the length of hospital stay. The random-effects model was used to calculate the risk ratios (RR), mean differences (MD), and confidence intervals (CI).

**Results:** Eight randomized controlled trials involving 818 patients were included in the meta-analysis. The mortality rate was not statistically different between the two groups (RR 0.60, 95% CI 0.32-1.14,  $p=0.12$ ,  $I^2=0\%$ ) (Figure 1a). Also, the rates of both early and late bleeding were not statistically different (RR 1.17, 95% CI 0.60-2.26,  $p=0.64$ ,  $I^2=0\%$ ) and (RR 0.74, 95% CI 0.25-2.14,  $p=0.58$ ,  $I^2=17\%$ ), respectively. The length of hospital stay was significantly shorter in the early feeding group (MD -0.99 days, 95% CI -1.15- -0.83,  $p<0.00001$ ,  $I^2=70\%$ ) (Figure 1b).

**Discussion:** Our meta-analysis demonstrated that early feeding after endoscopic interventions in patients with upper GI bleeding appears to be relatively safe. There was no statistical difference in mortality rates and in early or late bleeding rates. Moreover, it was associated with a shorter hospital stay.