Early oral feeding after elective colorectal surgery was well tolerated


Objective
To assess the safety and tolerability of early oral feeding compared with waiting for resolution of the ileus in patients recovering from elective colorectal surgery.

Design
Randomised controlled trial.

Setting
United States.

Patients
161 patients (mean age 53.5 y, 52% women) who had elective laparotomy between 1992 and 1994. Patients who had emergency laparotomy or any laparoscopic procedure were excluded.

Intervention
All patients had their nasogastric tubes removed immediately after surgery and then were allocated to early oral feeding with a clear liquid diet on day 1, followed by a regular diet as tolerated on day 2 or 3 (n = 80), or to regular feeding (nothing by mouth until resolution of the ileus) followed by a clear liquid diet and then a regular diet (n = 81). The nasogastric tube was reinserted if 2 episodes of vomiting > 100 mL occurred over 24 hours without bowel movements.

Main Outcome Measures
Vomiting, nasogastric tube reinsertion, mean time to resolution of the ileus, mean time to first meal ingestion, and mean length of hospital stay.

Main Results
Mean time to first meal ingestion was less in patients in the early feeding group than in patients in the regular feeding group (2.6 [SD 0.89] vs 5 days [SD 0.9], 95% CI for the 2.4-day difference 2.1 to 2.68, P<0.001). Patients who received early feeding compared with patients who received regular feeding did not differ for vomiting (21% vs 14%), nasogastric tube reinsertion (11% vs 10%), time to resolution of the ileus (3.8 vs 4.1 days), length of hospitalisation (6.2 vs 6.8 days), or complications (7.5% vs 6.1%).

Conclusions
Compared with only feeding after resolution of the ileus, early oral feeding was safe and well tolerated in patients recovering from elective colorectal surgery. It prompted earlier ingestion of a regular diet but not an earlier discharge from hospital.

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*Numbers calculated from data in article.

Commentary

The mandatory use of nasogastric intubation in elective abdominal and colorectal surgery has been successfully challenged over the past decade. This randomised controlled trial by Reisman and colleagues has now challenged the dogma of "wait for the ileus to resolve before commencing oral intake." The implications of an early return to diet are important to the quality of life of patients and to the potential cost savings of an earlier discharge from hospital, albeit at the potential risk for an increase in complications.

This study has convincingly shown that if patients are given fluids on day 1 after surgery, the first solid meal can be ingested more than 2 days earlier with no significant increase in the reinsertion rate of nasogastric tubes or in the rate of complications. The safety of early feeding with particular reference to anastomotic leaks is an encouraging finding of this study.

Some of the questions remaining include: Does the 50% relative increase in vomiting (21% vs 14%) have any clinical significance although it is not statistically significant? Could this contribute to the failure of an earlier discharge for the early feeding group? Further, it would be interesting to study the quality of life or to have some analog scale of patient tolerance to the competing regimens, particularly because no evidence was given of investigator blinding to the outcomes.

The results of this study provide evidence to support the idea that early feeding after elective abdominal and colorectal surgery is safe. This study failed, however, to show that this led to earlier resolution of the ileus and to earlier discharge from hospital, which may be the more important outcome measures.

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