Review: early feeding after major gynaecological surgery is safe except for an increase in nausea

QUESTION
In women having major abdominal gynaecological surgery, does early initiation of oral intake of food and fluids increase postoperative complications more than delayed initiation?

METHODS
Data sources: Cochrane Menstrual Disorders and Subfertility Group’s specialised register of controlled trials, Medline, CINAHL, EMBASE/Excerpta Medica, and Cochrane Central Register of Controlled Trials (to April 2007); reference lists; and experts.

Study selection and assessment: randomised controlled trials (RCTs) that compared early (<24 h) with delayed (>24 h, after resolution of postoperative ileus) initiation of oral intake of food and fluids after major open gynaecological surgery. Excluded were trials that were quasi-randomised or had no clear random allocation criteria; had important violations of the randomisation procedure or exclusions after allocation; or involved laparoscopic surgery or vaginal hysterectomy. 3 RCTs (n = 413, mean age 41–57 y) of women with both malignant and benign disease met the selection criteria. Quality of individual trials was assessed based on criteria including allocation concealment, intention-to-treat analysis, blinding, and follow-up.

Outcomes: symptoms of postoperative ileus (nausea, vomiting, and abdominal distension); time to presence of bowel sounds, passage of flatus, passage of stool, and start of solid diet; and length of hospital stay.

MAIN RESULTS
Early feeding increased risk of nausea, but groups did not differ for vomiting, abdominal distension, or ileus (table). Early feeding reduced time to bowel sounds by 0.5 day (95% CI 0.2 to 0.8; 1 RCT, n = 195) and time to solid diet by 1.5 days (CI 0.7 to 2.3; 2 RCTs, n = 301). Groups did not differ for time to passage of flatus or stool, or length of hospital stay.

CONCLUSIONS
In women having major abdominal gynaecological surgery, early initiation of oral intake of food and fluids increases risk of nausea but not other postoperative complications. Early feeding results in faster resumption of some aspects of bowel function and earlier return to a solid diet.

ABSTRACTED FROM

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Early v delayed initiation of oral intake of food and fluids after major abdominal gynaecological surgery*

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Number of trials (n)</th>
<th>Early feeding</th>
<th>Delayed feeding</th>
<th>RRI (95% CI)</th>
<th>NNH (CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nausea</td>
<td>1 (195)</td>
<td>43%</td>
<td>24%</td>
<td>79% (19 to 171)</td>
<td>6 (4 to 17)</td>
</tr>
<tr>
<td>Abdominal distension</td>
<td>2 (301)</td>
<td>34%</td>
<td>31%</td>
<td>7% (~23 to 41)</td>
<td>Not significant</td>
</tr>
<tr>
<td>Vomiting</td>
<td>2 (301)</td>
<td>6.1%</td>
<td>7.1%</td>
<td>14% (~100 to 63)</td>
<td>Not significant</td>
</tr>
<tr>
<td>Ileus</td>
<td>1 (96)</td>
<td>8.5%</td>
<td>14%</td>
<td>40% (~90 to 81)</td>
<td>Not significant</td>
</tr>
</tbody>
</table>

*Abbreviations defined in glossary. RRI, RRR, NNH, NNT, and CI calculated from data in article using a fixed-effects model.