Early compared with delayed oral fluids and food after caesarean section

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Early initiation of feeding was associated with reduced time to return of bowel sounds, reduced postoperative hospital stay and with suggestion of reduced abdominal distention. There is no evidence to justify a policy of restricting oral fluids or food after uncomplicated caesarean section.

RHL Commentary by Liabsuetrakul T

1. EVIDENCE SUMMARY

The review aims to evaluate the benefits and harms of a policy of early versus delayed initiation of oral fluids and food after caesarean section operation. The definitions of 'early' and 'late' varied in different trials. Although, 6 trials were included in the review, most of the findings of the review are based on the results from one or two trials. Early initiation of feeding was associated with: reduced time to return of bowel sounds (one study, 118 women, -4.30 hours, 95% confidence interval (CI): -6.78 – -1.82 hours); reduced postoperative hospital stay (2 studies, 220 women relative risk (RR): -0.75 days, 95% CI: -1.37 – -0.12 days); and with suggestion of reduced abdominal distention (3 studies, 369 women, RR: 0.78, 95% CI: 0.55–1.11). The reviewers concluded that there was no evidence to justify a policy of restricting oral fluids or food after uncomplicated caesarean section and recommended further well-designed trials.

The evidence base to guide decision-making is weak due to variations in definitions of the interventions, small sizes of the trials and the possibility of performance bias (1) in some of the trials. Except for the type of analgesia other planned subgroup analyses could not be conducted due to lack of data.

2. RELEVANCE TO UNDER-RESOURCED SETTINGS

2.1. Magnitude of the problem
Caesarean section is a common operation in obstetric care. Caesarean section rates are around 25–40% in some of the large Asian countries such as China (2), India (3), South Korea (4) and Thailand (5). Delayed initiation of oral fluids and food may be uncomfortable for women in the postoperative period. Women who have regional anesthesia for caesarean section may be more comfortable with taking oral fluids and food early. However, established hospital routines often restrict early intake of food and fluids for the fear of abdominal distention and possible vomiting. In Thailand, the general policy after caesarean section is to keep the women 'nil per mouth' for 12–24 hours or until bowel sounds return. After this, oral fluids and clear diet are initiated, later followed by regular diet.

2.2. Applicability of the results

Since the trials included in the review were conducted in both developing and developed countries, the findings would be applicable in all settings. However, no evidence was found to justify a policy of delaying food intake (or otherwise). A number of factors may influence the decision regarding early or late initiation of fluids and food. These include: the type of abdominal incision, peritoneum closure, the extent of bowel irritation and use of other operative procedures during the caesarean section operation. Low midline skin incision, swab packing during operation or cleaning amniotic fluid or blood in the abdominal cavity and closure of the peritoneum may also affect the return of bowel function (6, 7). All these factors need to be considered when determining the applicability of the findings of the trials on 'early' versus 'delayed' initiation of fluids and solid food.

2.3. Implementation of the intervention

Early initiation of fluids and food after an uncomplicated caesarean section operation would be easy to implement in all settings. However, it must be acknowledged that sound evidence to back either policy is lacking and changes in routines should be audited to ensure that unexpected adverse events can be detected.

3. RESEARCH

There is a need for well-designed randomized trials to compare early versus delayed initiation of oral fluids and/or intake food after caesarean section, regardless of type of settings. The type of abdominal incision, peritoneal closure, the level of bowel irritation and use of other techniques of caesarean section should be recorded or used for stratification to aid the interpretation of the results of such trials.

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References


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