

Evidence Update

Summary of a Cochrane Review

Maternal Health Series

Which abdominal incision is best to use in Caesarean section?

The Joel-Cohen incision appears better than the Pfannenstiel incision.

Background

Several different types of abdominal incision may be used for caesarean section. Two commonly used transverse incisions are the Joel-Cohen and the Pfannenstiel incisions.

Inclusion criteria

Studies:

Randomized controlled trials.

Participants:

Pregnant women due to have their baby by Caesarean section.

Intervention:

Comparison of any prespecified abdominal incision techniques for caesarean section.

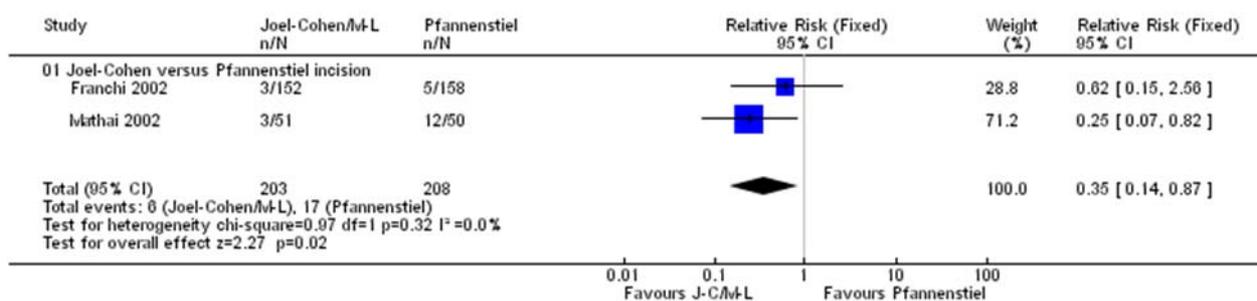
Selected outcomes:

In the mother: fever, analgesia, blood loss, blood transfusion; in the baby: Apgar score, admission to special care unit.

Results

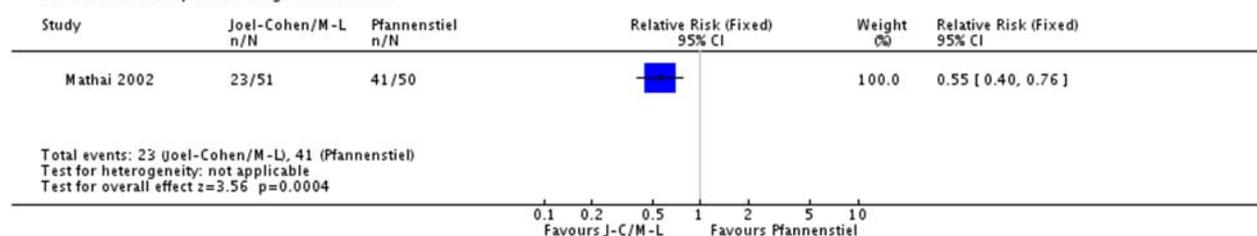
- Four trials with 566 women met the inclusion criteria. Three contributed data to the review; all were adequately concealed.
- Fever was less common with the Joel-Cohen incision (relative risk (0.35, 95% confidence interval 0.14 to 0.87; 411 women, 2 trials).
- Postoperative on-demand analgesic requirements were lower with the Joel-Cohen incision compared with the Pfannenstiel incision (RR 0.55, 95% CI 0.40 to 0.76; 101 women, 1 trial) and blood loss was less (weighted mean difference -58 mL, 95% CI -108.51 to -7.49 mL; 101 women, 1 trial).
- In one trial (101 women), the Joel-Cohen incision was associated with shorter operating time (WMD -11.4 minutes, 95% CI -16.55 to -6.25 minutes), shorter delivery time (WMD -1.90 minutes, 95% CI -2.53 to -1.27), and shorter postoperative hospital stay (WMD -1.50 days, 95% CI -2.16 to -0.84 days) compared to the Pfannenstiel incision.
- In comparisons between the two incisions, no significant differences were found in the time to start of breastfeeding, or admission to or length of stay in special care baby unit.

Joel-Cohen incision vs Pfannenstiel incision: postoperative fever



Joel-Cohen incision vs Pfannenstiel incision: requirement for postoperative analgesia

Review: Abdominal surgical incisions for caesarean section
 Comparison: 01 Joel-Cohen versus Pfannenstiel incision
 Outcome: 02 Postoperative analgesia on demand



Authors' conclusions

Implications for practice:

The Joel-Cohen incision has benefits over the Pfannenstiel incision in terms of length of surgery, time from anaesthesia to delivery, and postoperative fever, pain, and duration of hospital stay. There is insufficient evidence to assess the effectiveness and safety of other abdominal incision techniques for caesarean section.

Implications for research:

Further trials are needed to assess the effectiveness and safety of alternative incision methods for caesarean section, reporting on a wider range of outcomes relevant to mothers and their babies.