

Amniotomy plus intravenous oxytocin for induction of labour

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Summary

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Intravenous oxytocin and amniotomy compares well with other forms used in the third trimester (full term) to bring on labour.

Sometimes it is necessary to help get labour started. There are several methods used and they either ripen the cervix or make the uterus start contracting. Oxytocin is a drug used to stimulate contractions of the uterus. Amniotomy (breaking the waters) helps bring on contractions. The review of trials found that oxytocin combined with amniotomy compares well with other forms of labour induction. However, adverse risks of amniotomy include pain and discomfort, bleeding, possible infection in the uterus and a decreased heart rate in the baby. The risk of infection following amniotomy is particularly important in areas where HIV is prevalent.

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Abstract

Background

Induction of labour is a common obstetric intervention. Amniotomy alone for induction of labour is reviewed separately and oxytocin alone for induction of labour is being prepared for inclusion in The Cochrane Library. This review will address the use of the combination of these two methods for induction of labour in the third trimester. This is one of a series of reviews of methods of cervical ripening and labour induction using standardised methodology.

Objectives

To determine, from the best available evidence, the efficacy and safety of amniotomy and intravenous oxytocin for third trimester induction of labour.

Search strategy

The Cochrane Pregnancy and Childbirth Group Trials Register, the Cochrane Controlled Trials Register and reference lists of articles were searched. Date of last search: May 2001.

Selection criteria

Clinical trials comparing amniotomy plus intravenous oxytocin used for third trimester cervical ripening or labour induction with placebo/no treatment or other methods listed above it on a predefined list of labour induction methods.

Data collection and analysis

Trial quality assessment and data extraction were done by both reviewers. A strategy was developed to deal with the large volume and complexity of trial data relating to labour induction. This involved a two-stage method of data extraction. The initial data extraction was done centrally, and incorporated into a series of primary reviews arranged by methods of

induction of labour, following a standardised methodology. The data is to be extracted from the primary reviews into a series of secondary reviews, arranged by category of woman.

Main results

Seventeen trials involving 2566 women were included. Amniotomy and intravenous oxytocin were found to result in fewer women being undelivered vaginally at 24 hours than amniotomy alone (relative risk (RR) 0.03, 95% confidence intervals (CI) 0.001-0.49). This finding was based on the results of a single study of 100 women. As regards secondary results amniotomy and intravenous oxytocin resulted in significantly fewer instrumental vaginal deliveries than placebo (RR 0.18, CI 0.05-0.58). Amniotomy and intravenous oxytocin resulted in more postpartum haemorrhage than vaginal prostaglandins (RR 5.5, CI 1.26-24.07). Significantly more women were also dissatisfied with amniotomy and intravenous oxytocin when compared with vaginal prostaglandins, RR 53, CI 3.32-846.51.

Authors' conclusions

Data on the effectiveness and safety of amniotomy and intravenous oxytocin are lacking. No recommendations for clinical practice can be made on the basis of this review. Amniotomy and intravenous oxytocin is a combination of two methods of induction of labour and both methods are utilised in clinical practice. If their use is to be continued it is important to compare the effectiveness and safety of these methods, and to define under which clinical circumstances one may be preferable to another.