Active management of labour: current knowledge and research issues
Thornton J G, Lilford R J

Authors' objectives
To review the evidence that 'active management' of labour (strict diagnostic criteria for labour, early amniotomy, early use of oxytocin and continuous professional support) reduces rates of Caesarean sections and operative vaginal delivery in first labours.

Searching
The Cochrane Pregnancy and Childbirth Database was searched for RCTs. The authors do not state which other sources were examined.

Study selection
Study designs of evaluations included in the review
Randomised controlled trials (RCTs) and observational studies.

Specific interventions included in the review
Amniotomy, early oxytocin, amniotomy and early oxytocin, companion in labour, and diagnosis of labour.

Participants included in the review
Women in labour.

Outcomes assessed in the review
Maternal outcomes: use of oxytocin, use of analgesia, Caesarean section rates, instrumental delivery rates, febrile morbidity, blood transfusion, hyperstimulation, subjective unpleasantness and pain. Foetal outcomes: abnormal heart rate, an Apgar score less than 7 at 5 minutes, arterial cord pH less than 7.2, meconium aspiration, jaundice, admission to special care unit and cephalohaematoma.

How were decisions on the relevance of primary studies made?
The authors do not state how the papers were selected for the review, or how many of the authors performed the selection. Details are provided for individual reviews (see Other Publications of Related Interest nos.1 to 4).

Assessment of study quality
Details of the validity assessment are provided in the individual reviews (see Other Publications of Related Interest nos.1-4).

Data extraction
The authors do not state how the data were extracted for the review, or how many of the authors performed the data extraction. Details are provided for individual reviews (see Other Publications of Related Interest nos.1 to 4).

Methods of synthesis
How were the studies combined?
Meta analysis of RCTs. The authors do not state the method used in this paper (see Other Publications of Related Interest nos. 1 to 4). Observational studies were combined narratively.

How were differences between studies investigated?
For early oxytocin treatment, control groups differed in that 2 had no intervention and 2 had ambulation. For companion in labour, settings differed according to whether non-professional partners were usually present during
Results of the review
Amniotomy: 6 RCTs, 1 was excluded due to biased allocation and exclusions. Early oxytocin: 4 RCTs. Oxytocin and amniotomy combined: 3 RCTs. Companion in labour: 10 RCTs.

Numerical data is presented in graphical form only. Amniotomy, early oxytocin, and the combination of amniotomy and early oxytocin do not reduce Caesarean section or instrumental vaginal delivery rates; the 95% confidence intervals (CIs) for odds ratios (ORs) all include 1. The provision of a companion throughout labour reduces Caesarean section and instrumental vaginal delivery rates; 95% CIs for ORs are all less than 1. Early oxytocin increases hyperstimulation, subjective unpleasantness and pain. The combination of amniotomy and early oxytocin increases the incidence of blood transfusion.

Authors’ conclusions
The evidence supports the hypothesis that active management of labour reduces the rates of operative interventions for delivery, but it is the presence of a companion in labour, rather than amniotomy or early use of oxytocin, which is the effective ingredient of an active management package.

CRD commentary
This is a summary review of several Cochrane Collaboration systematic reviews of RCTs, and incorporates observational data in a discussion of the package of interventions collectively known as active management of labour. Details of the methods of the original Cochrane Collaboration reviews are not presented in this paper. Figures 2 and 3 have been presented in the wrong order, in relation to the text, and are incorrectly titled.

Implications of the review for practice and research
Support during labour by the presence of a non-professional companion improves outcomes and should be encouraged. There is no evidence that oxytocin and amniotomy give any significant benefit in early labour.

Bibliographic details

PubMedID
8081133

Original Paper URL
http://www.bmj.com/content/309/6951/366

Other publications of related interest


Indexing Status
Subject indexing assigned by NLM

MeSH
Amnion /surgery; Caregivers; Cesarean Section; Delivery, Obstetric /methods; Female; Humans; Labor Onset; Labor, Induced; Labor, Obstetric; Meta-Analysis as Topic; Oxytocin /administration & dosage; Pregnancy; Pregnancy Outcome; Randomized Controlled Trials as Topic

AccessionNumber
11994008055

Date bibliographic record published
02/03/1995

Date abstract record published
02/03/1995

Record Status
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.