

Active versus expectant management in the third stage of labour

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Abstract

Background

Expectant management of the third stage of labour involves allowing the placenta to deliver spontaneously or aiding by gravity or nipple stimulation. Active management involves administration of a prophylactic oxytocic before delivery of the placenta, and usually early cord clamping and cutting, and controlled cord traction of the umbilical cord.

Objectives

The objective of this review was to assess the effects of active versus expectant management on blood loss, post partum haemorrhage and other maternal and perinatal complications of the third stage of labour.

Search strategy

We searched the Cochrane Pregnancy and Childbirth Group trials register.

Selection criteria

Randomised trials comparing active and expectant management of the third stage of labour in women who were expecting a vaginal delivery.

Data collection and analysis

Trial quality was assessed and data were extracted independently by the reviewers.

Main results

Five studies were included. Four of the trials were of good quality. Compared to expectant management, active management (in the setting of a maternity hospital) was associated with the following reduced risks: maternal blood loss (weighted mean difference -79.33 millilitres, 95% confidence interval -94.29 to -64.37); post partum haemorrhage of more than 500 millilitres (relative risk 0.38, 95% confidence interval 0.32 to 0.46); prolonged third stage of labour (weighted mean difference -9.77 minutes, 95% confidence interval -10.00 to -9.53). Active management was associated with an increased risk of maternal nausea (relative risk 1.83, 95% confidence interval 1.51 to 2.23), vomiting and raised blood pressure (probably due to the use of ergometrine). No advantages or disadvantages were apparent for the baby.

Authors' conclusions

Routine 'active management' is superior to 'expectant management' in terms of blood loss, post partum haemorrhage and other serious complications of the third stage of labour. Active management is, however, associated with an increased risk of unpleasant side effects (eg nausea and vomiting), and hypertension, where ergometrine is used.

Active management should be the routine management of choice for women expecting to deliver a baby by vaginal delivery in a maternity hospital. The implications are less clear for other settings including domiciliary practice (in developing and industrialised countries).

Plain language summary

Active versus expectant management in the third stage of labour

Active management of the third stage of labour reduces blood loss and haemorrhage after birth.

The third stage of labour is that period from the birth of the baby until delivery of the placenta. Uterine muscles contract to stop maternal blood loss once the placenta separates. If this process does not work efficiently, the mother can haemorrhage. The review of trials found that active management of the third stage of labour, including drug administration, early cord clamping and controlled cord traction was more effective than expectant management, using none of these. Some of the drugs can cause side effects of nausea and vomiting. No effects were apparent for the baby.