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#### [Intervention Review]

# Hands and knees posture in late pregnancy or labour for fetal malposition (lateral or posterior)

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**Editorial group:** Cochrane Pregnancy and Childbirth Group.

Publication status and date: Edited (no change to conclusions), published in Issue 1, 2009.

**Citation:** Hunter S, Hofmeyr GJ, Kulier R. Hands and knees posture in late pregnancy or labour for fetal malposition (lateral or posterior). *Cochrane Database of Systematic Reviews* 2007, Issue 4. Art. No.: CD001063. DOI: 10.1002/14651858.CD001063.pub3.

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#### **ABSTRACT**

#### **Background**

Lateral and posterior position of the baby's head (the back of the baby's head facing to the mother's side or back) may be associated with more painful, prolonged or obstructed labour and difficult delivery. It is possible that certain positions adopted by the mother may influence the baby's position.

# **Objectives**

To assess the effects of adopting a hands and knees maternal posture in late pregnancy or during labour when the presenting part of the fetus is in a lateral or posterior position compared with no intervention.

# Search methods

We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (July 2007) and the Cochrane Central Register of Controlled Trials (*The Cochrane Library* 2007, Issue 2).

## Selection criteria

Randomised trials of hands and knees maternal posture compared to other postures or controls.

## **Data collection and analysis**

Two review authors assessed trial eligibility and quality.

# **Main results**

Three trials (2794 women) were included. In one trial (100 women), four different postures (four groups of 20 women) were combined for the comparison with the control group of 20 women. Lateral or posterior position of the presenting part of the fetus was less likely to persist following 10 minutes in the hands and knees position compared to a sitting position (one trial, 100 women, relative risk (RR) 0.26, 95% confidence interval (CI) 0.18 to 0.38). In a second trial (2547 women), advice to assume the hands and knees posture for 10 minutes twice daily in the last weeks of pregnancy had no effect on the baby's position at delivery or any of the other pregnancy outcomes measured. The third trial studied the use of hands and knees position in labour and involved 147 labouring women at 37 or more weeks gestation. Occipito-posterior position of the baby was confirmed by ultrasound. Seventy women, who were randomised in the intervention group, assumed hands and knees positioning for a period of at least 30 minutes, compared to 77 women in the control group who did not assume



hands and knees positioning in labour. The reduction in occipito-posterior or -transverse positions at delivery and operative deliveries were not statistically significant. There was a significant reduction in back pain.

#### **Authors' conclusions**

Use of hands and knees position for 10 minutes twice daily to correct occipito-posterior position of the fetus in late pregnancy cannot be recommended as an intervention. This is not to suggest that women should not adopt this position if they find it comfortable. The use of position in labour was associated with reduced backache. Further trials are needed to assess the effects on other labour outcomes.

#### PLAIN LANGUAGE SUMMARY

#### Hands and knees posture in late pregnancy or labour for fetal malposition (lateral or posterior)

Assuming the hands and knees posture in late pregnancy does not improve pregnancy outcomes but use in labour is beneficial.

The best position for babies during birth is head down, with the back of their head facing forward. When babies lie with the back of their head towards the mothers' side (lateral) or towards the mothers' back (posterior), the labour may be longer and more painful. The review of three trials (2794 women) found that assuming the hands-knees position for ten minutes helped the baby to modify position at the time, but suggesting women assume the hands and knees position for ten minutes twice daily during late pregnancy had no effect on longer-term outcomes in labour. Using this position during labour reduced backache.