

BREECH BIRTH SYNTHESIS RESEARCH GAPS FROM COCHRANE REVIEWS (Cochrane Library Issue 1, 2009)

The faces indicate the direction of findings in each review:

- ☺ Likely to be effective
- ☹ Both benefits and risks
- ❓ Uncertain or limited effect
- ☹ Likely to be ineffective or potentially harmful

Important research implications are more likely to arise from reviews with uncertain findings or where the benefits and risks are mixed.

Methods to change presentation of a breech fetus

❓ Moxibustion for correcting a breech presentation (Coyle 2005)

In one trial, moxibustion reduced the need for external cephalic version.

Assessed as up-to-date: 16 February 2005

- Need more trials of moxibustion (with and without acupuncture), and safety and women's views need to be addressed
- Need to determine optimal timing, frequency and duration of moxibustion
- Need to compare moxibustion with external cephalic version/postural management

❓ Postural management for correcting a breech presentation (Hofmeyr 2000)

It is not clear if different positions during pregnancy change a breech baby's position in the womb.

Assessed as up-to-date: 29 September 2001

- Need to determine optimal timing, frequency and duration of postural management
- Need larger trials that measure mothers' views

❓ Policy of expedited (rapid delivery from umbilicus to head) breech birth (Hofmeyr 1996a)

Assessed as up-to-date: 28 June 2007

No trials able to be included – any future study should measure perinatal morbidity and mortality as well as maternal trauma and satisfaction with birth

☺ External cephalic version (ECV) for correcting a breech presentation at term (Hofmeyr 1996b)

Attempting cephalic version at term reduces the chances of non-cephalic births and caesarean births

Assessed as up-to-date: 17 April 2005

- Need to refine selection of women (e.g. previous caesarean), and role of ECV during labour, in non-longitudinal lies

- Need to assess maternal views and satisfaction with ECV

? External cephalic version (ECV) for correcting a breech presentation before term (Hutton 2006)

ECV commenced before term reduces non-cephalic births compared with no ECV attempt; beginning ECV at 34-35 weeks may have some benefits.

Assessed as up-to-date: 17 October 2005

Need larger RCTs that measure neonatal morbidity and mortality and rates of preterm birth - a large international trial is in progress

Additional interventions to help external cephalic version

☺ Tocolysis (Hofmeyr 2004)

Tocolysis increases the success rate of ECV at term

Last assessed as up-to-date: 30 March 2004

- Scope for further RCTs of routine tocolysis for external cephalic version at term, particularly looking at reduction of force required for successful ECV, and the possible risks of maternal cardiovascular side-effects
- Need further RCTs of routine versus selective use of tocolysis, including longterm outcomes

☹ Nitroglycerine (Hofmeyr 2004)

Sublingual nitroglycerine was associated with significant adverse effects

Last assessed as up-to-date: 30 March 2004

Further RCTs of nitroglycerine are not encouraged

? Fetal acoustic stimulation (Hofmeyr 2004)

In one trial, fetal acoustic stimulation reduced ECV failure.

Last assessed as up-to-date: 30 March 2004

Further RCTs of fetal acoustic stimulation in midline fetal spine positions are justified

? Amnioinfusion (Hofmeyr 2004)

No trials of amnioinfusion were located

Last assessed as up-to-date: 30 March 2004

? Regional anaesthesia (Hofmeyr 2004)

Not clear if regional anaesthesia helps reduce ECV failure.

Last assessed as up-to-date: 30 March 2004

- Need further RCTs of epidural or spinal analgesia, assessing vaginal displacement of the presenting part (ensuring similar amounts of fluid in the regional analgesia and control groups)
- Need to investigate the possible effect of intravenous hydration prior to ECV attempt to increase amniotic fluid volume

☺ **Planned caesarean for term breech (Hofmeyr 2003)**

Compared with planned vaginal birth, planned caesarean birth reduces perinatal or neonatal death or serious neonatal morbidity, but may increase maternal complications.

Last assessed as up-to-date: 29 November 2004

- Need further RCTs that address longterm benefits and risk of planned caesarean sections for term breech births

☹ **Caesarean delivery for the second twin not presenting cephalically (Crowther 1996)**

Caesarean birth for the second twin when the baby's position is not head down increased the risk of infections for the mother without other obvious benefits.

Last assessed as up-to-date: 31 January 2007

- Need trials to assess if the policy of caesarean section for a second twin not presenting cephalically increases maternal morbidity.

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