BREECH PREGNANCY
Supporting Information

This guideline and supporting information has been prepared with reference to the following:


All women with an uncomplicated breech pregnancy at term (37-42 weeks) should be offered External Cephalic Version (ECV)?

A Cochrane systematic review of five studies in a total of 433 women (Hofmeyr, 1996) found a statistically (and clinically) significant reduction in non-cephalic birth (RR 0.38; 95% CI 0.18 - 0.80) and caesarean section (RR 0.55; 95% CI 0.33 - 0.91) when ECV was attempted. No significant complications were observed in any of the infants. Evidence | library.nhs.uk

An unblinded multicentred randomised controlled trial in a total of 1543 women from 68 centres in 21 countries (Hutton, 2011) compared early ECV (34-35 weeks) with delayed ECV (37-42 weeks). Fewer fetuses were in a non-cephalic presentation at birth in the early ECV group (314/765 [41.1%] versus 377/768 [49.1%]) in the delayed ECV group; relative risk [RR] 0.84, 95% CI 0.75, 0.94, P=0.002). There were no differences in rates of caesarean section (398/765 [52.0%] versus 430/768 [56.0%]; RR 0.93, 95% CI 0.85, 1.02, P=0.12) or in risk of preterm birth (50/765 [6.5%] versus 34/768 [4.4%]; RR 1.48, 95% CI 0.97, 2.26, P=0.07) between groups. The authors concluded that external cephalic version at 34-35 weeks versus 37 or more weeks of gestation increased the likelihood of cephalic presentation at birth but did not reduce the rate of caesarean section and may increase the rate of preterm birth.

A Cochrane review of 25 studies in a total of 2548 women (Cluver, 2012) found that: “Betastimulants, to facilitate ECV, increased cephalic presentation in labour and birth, and reduced the caesarean section rate in both nulliparous and multiparous women, but there were insufficient data on adverse effects. Calcium channel blockers and nitric acid donors had insufficient data to provide good evidence. The possible benefits of tocolysis to reduce the force required for successful version and the possible risks of maternal cardiovascular side effects, need to be addressed further. Further trials are needed to compare the effectiveness of routine versus selective use of tocolysis, the role of regional analgesia, fetal acoustic stimulation, amnioinfusion and the effect of intravenous or oral hydration prior to ECV. Although randomised trials of nitroglycerine are small, the results are sufficiently negative to discourage further trials.”

Evidence Level: I

Planned caesarean section is the best method of delivering a term frank or complete breech singleton?

A Cochrane systematic review of three trials in a total of 2396 women (Hofmeyr, 2003) found that 550/1227 (45%) of those women allocated to vaginal delivery actually had caesareans. Planned caesarean was safer (RR 0.33; 95% CI 0.19 - 0.56), with a reduction in perinatal or neonatal death (other than those associated with foetal abnormalities).

Evidence Level: I

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Does spinal analgesia increase the success rate of ECV?

A RCT in 70 nulliparous women (Weiniger, 2007) randomised 36 to receive spinal analgesia (7.5 mg bupivacaine) and 34 to receive no analgesia before ECV. ECV was successful in 24 of 36 (66.7%) of the spinal analgesia group, compared with 11 of 34 (32.4%) without, P=0.004 (95% CI of the difference: 0.0954-0.5513). ECV with spinal analgesia resulted in a lower visual analogue pain score, 1.76+/−2.74 compared with 6.84+/−3.08 without, P<0.001. A secondary analysis logistic regression model demonstrated that the odds of successful ECV were 4.0-fold higher when performed with spinal analgesia P=0.02 (95% CI, odds ratio [OR] 1.2-12.9). Complete breech presentation before attempting external cephalic version increased the odds of success 8.2-fold, P=0.001 (95% CI, OR 2.2-30.3).

Similar results were achieved in a later study by the same team involving 64 multiparous women (Weiniger, 2010). These results differ from an earlier RCT in 102 women (Dugoff, 1999). This randomised 50 (43%) to spinal analgesia and 52 (51%) to no analgesia. Successful ECV occurred in 44% vs 42% respectively, which was not statistically significant.


Weiniger CF, Ginosar Y, Elchalal U. Randomized controlled trial of external cephalic version in term multiparae with or without spinal analgesia. Br J Anaesth 2010;104:613-8

Evidence Level: II

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