

# EXTERNAL CEPHALIC VERSION (ECV) OUTCOMES AT WHISTON HOSPITAL AND EFFECTS ON CAESAREAN RATES

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## OBJECTIVES

- To assess the ECV service and success rates at Whiston hospital, and its impact on caesarean section rates.
- To look at successful ECV's and their rates of intervention at delivery as there is evidence showing that vaginal birth after ECV is associated with higher rates of intervention

## BACKGROUND

- Breech presentation accounts for 3-4% of presentations at term.
- Associated with higher perinatal mortality and morbidity.
- Consensus view is that caesarean section is the safest method of delivering a breech baby, as this reduces the rate of complications.
- RCOG currently recommends that all women with uncomplicated breech presentations at term should be offered External Cephalic Version (ECV) to try to convert to cephalic presentation and enable a normal delivery, thereby reducing caesarean rate.
- If successful ECV therefore converts a high risk pregnancy to low risk.
- Success rates for ECV in the literature varies and is in the region of 30-80%, depending on a wide variety of factors.

## METHODOLOGY

Data was collated from ECV records on delivery suite from January 2007- June 2009. This provided 98 cases for analysis. Standards set;

- ✓ At least 60% ECVs attempted should be successful.
- ✓ There should be three attempts made for each ECV performed unless contraindicated
- ✓ There should be less than 5% complication rate
- ✓ 95% of ECVs should be performed after 36 weeks
- ✓ 95% of successful ECVs should have a cephalic presentation at birth

These standards were set in accordance with RCOG green top guideline No 20a 'ECV and reducing the incidence of breech presentation', and also from data from previous audits on ECV success rates in the trust which showed trust success rate of 68%

## RESULTS

### Demographics

- Age range 16~41yrs, average 29yrs.
- 63%(n=62) were primiparous and 37%(n=36) were multiparous, range 1-4.
- Gestation ranged from 36-40<sup>+</sup>7wks.

### Overall ECV success rate was 60% (n=59)

ECV was more successful in Multiparous than Primiparous women; success rates in primips was 52% (32) and in multips was 75% (27)

ECV was more successful in those with gestation between 36-38weeks

| MODE OF DELIVERY | SUCCESSFUL | UNSUCCESSFUL |
|------------------|------------|--------------|
| VAGINAL          | 81% (48)   |              |
| ELECTIVE LUSCS   | 2% (1)     |              |
| EMERGENCY LUSCS  | 15% (9)    |              |
| OTHER            | 2% (1)     |              |

Of the successful ECV's, CS rate was 17%, which is still lower than the national average of 21.5% and below Whiston Hospital caesarean rate which is 23.1% from 3,100 births per year.

Of all cases studied, there were just 3 complications recorded

93% of ECVs resulted in APGARs of >7 at 1 min  
95% of ECVs resulted in APGARs of >9 at 5 min

These results support the safety of ECV.

- ✓ All standards were met.

## CONCLUSIONS

- Whiston ECV success rate is similar to national averages.
- Despite 17% of successful ECV's going on to have a caesarean section, this is still a lower figure than the overall caesarean section rate in the UK (21.5%)
- In the US over 85% of breechs are delivered by CS; total CS deliveries in this audit were 50%, thus showing ECV is a worthwhile intervention reducing number of CS dramatically.
- There was a very small risk of complications (n=3).

In conclusion, ECV is a low risk procedure with a good chance of converting a high risk pregnancy to a low risk pregnancy thus increasing maternal choices and decreasing risks associated with labour.

### Recommendations

- Find new promotion strategies to encourage women to choose ECV in preference to caesarean section
- Audit opinions and attitudes of patients/doctors regarding ECV to highlight possible promotion strategies
- Better recording of interventions in labour for successful ECVs
- As currently only 1 consultant offers the service in the trust currently; to train up another consultant/registrar in methods of ECV to ensure good service provision
- Reaudit in 2 years
- Formulate a new ECV patient information leaflet to promote ECV thereby improving service

## REFERENCES

- RCOG Green Top guideline 20a; External Cephalic Version and reducing the incidence of breech presentation. Issued December 2006.
- RCOG Green Top Guideline 20b; The management of breech presentation. Issued December 2006.
- NICE Guideline CG13; Caesarean Section. Issued April 2004.
- BirthchoiceUK website, 2009.