# External Cephalic Version (ECV)

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This guideline has been registered with the trust. However, clinical guidelines are guidelines only. The interpretation and application of clinical guidelines will remain the responsibility of the individual clinician. If in doubt contact a senior colleague or expert. Caution is advised when using guidelines after the review date.
1. Introduction

External cephalic version (ECV) is the manipulation of the fetus, through the abdomen, to a cephalic presentation.

ECV reduces the rate of breech presentation at birth and reduces the chance of Caesarean section.

All women with an uncomplicated breech presentation at term (37-42 weeks) should be offered ECV.

The Royal College of Obstetrics & Gynaecology (RCOG) recommends offering ECV to primiparous women from 36⁺₀ and multiparous women from 37⁺₀.

ECV done from 34⁺₀ to 35⁺₆ has a higher success rate and a lower Caesarean section rate than later ECV. However, this does come with a slightly increased rate of pre-term deliveries with no difference in serious neonatal or maternal morbidity or mortality. ECV before 36⁺₀ weeks should only be offered by an appropriately trained professional, with agreement from the person undertaking the ECV if it is not being done by the consultant themselves.

2. Prerequisites

Women should be counselled regarding the risks and benefits of the procedure and given a leaflet with all the information. Consent should be obtained for the procedure. Verbal consent is acceptable.

3. Contraindications

**Absolute contraindications**

- Where Caesarean section is required for another reason, e.g. placenta praevia
- Abnormal CTG
- Major uterine abnormality
- Ruptured membranes
- Multiple pregnancy (except for delivery of the second twin)
- Antepartum haemorrhage within the last 7 days

**Relative contraindications**

- Small-for-gestational-age fetus with abnormal Doppler parameters
- Pre-eclampsia
- Oligohydramnios
- Major fetal anomalies (it could be appropriate to offer ECV to avoid LSCS is the baby has poor prognosis)
- Unstable lie.

ECV can be offered following previous lower segment Caesarean section.

ECV for unstable lie should only be offered after careful discussion of the risks of reversion and cord prolapse and with agreement from the person undertaking the ECV.
4. Success rate and Complications

Rates of successful version vary from 30% up to 80% depending on race, parity, body mass index, uterine tone, liquor volume, engagement of the breech, whether the head is palpable, the use of tocolysis, and the experience of the person undertaking the ECV.

An overall success rate of 40% in primiparous women and 60% in multiparous women is typical.

ECV has a very low complication rate. Immediate emergency caesarean section can be required due to presumed fetal compromise in 1 in 200 cases. ECV can be associated with fetal bradycardia and a non-reactive CTG; they are almost invariably transient and resolve spontaneously.

A few case reports exist of complications such as placental abruption, uterine rupture and fetomaternal haemorrhage. Randomised controlled trials have reported no evidence of an increase in neonatal morbidity and mortality. ECV does not appear to promote labour.

5. Booking of ECV

**Frimley Park site**: ECV is booked in the induction of labour diary on Labour Ward via the labour ward co-ordinator as per the timings on the front of the diary.

**Wexham Park site**: ECV is undertaken in the breech clinic on Monday afternoons.

A second attempt can be offered if the first is unsuccessful although the success rate is lower than for the initial attempt.

6. Procedure

ECV should be performed with ultrasound and cardiotocography (CTG) available and where emergency Caesarean section can occur within 30 minutes.

An appropriately trained obstetrician or midwife should perform the procedure.

The fetal heart should be monitored on a CTG for at least 15 minutes prior to the ECV and 30 minutes after the procedure and both CTG’s should be classified as normal.

Ultrasound scan should be performed prior to ECV to assess presentation, fetal position, liquor volume and placental location. This can be in the ultrasound department or by the person undertaking the ECV if they have appropriate ultrasound training.

Tocolysis with beta-2-agonists may be offered to women undergoing ECV as it has been shown to increase the success rate and should be considered where an initial attempt at ECV without tocolysis has failed.

Women should be advised beta-2-agonists can cause transient maternal tachycardia, palpitations, tremor and headache.
The usual protocol is; a slow intravenous bolus of salbutamol 0.25mg either routinely or if an initial ECV attempt has failed (Wexham Park Hospital).

Terbutaline 0.25mg or 0.5mg subcutaneously prior to ECV (Frimley Park Hospital)

Each attempt at ECV should last no longer than 5 minutes. The fetal heart should be auscultated between attempts. ECV should be abandoned
- after 3 unsuccessful attempts
- for fetal heart rate abnormalities
- or for maternal discomfort.

7. Care after ECV

Unsensitised Rh negative women should be given Anti-D prophylaxis (500 iu) and have a Kleihauer taken.

All women should be seen within the following week later to check presentation, either by the community midwife or in the antenatal clinic or breech clinic (WPH only).

Following ECV women should be encouraged to contact maternity triage if they have any concerns or for reduced fetal movements, abdominal pain or vaginal bleeding.

Following unsuccessful ECV, mode of delivery should be discussed including breech vaginal birth or elective Caesarean section. If the woman chooses elective Caesarean section, this should be booked from 39 weeks gestation. If the woman chooses a breech vaginal birth she should discuss this with a consultant midwife or obstetrician.

Following successful ECV women may either labour spontaneously or be offered induction of labour for the usual obstetric indications. When admitted in labour following a successful ECV an ultrasound scan should be performed to confirm presentation. Women should be informed of a reported increased incidence of emergency LSCS following ECV if they are considering delivery at home or in a midwife led unit.

8. Auditable Standards
- The proportion of women with a breech presentation who are offered ECV
- The success rate of ECV
- The complication rate following ECV

9. Monitoring compliance
This guideline will be subject to three yearly audit. The audit midwife is responsible for coordinating the audit. Results presented to the department clinical audit meeting. Action plans will be monitored at the quarterly department clinical governance meeting.
10. References

1. Royal College of Obstetricians and Gynaecologists, External cephalic version and reducing the incidence of breech presentation 2006 Green Top guideline no 20a


