

## Breech Birth

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## Contents

1. [Purpose of guideline](#)
2. [Introduction](#)
3. [Diagnosis of breech flowchart](#)
4. [External cephalic version \(ECV\)](#)
  - 4.1. [Booking an ECV](#)
  - 4.2. [Absolute contra-indications for ECV](#)
  - 4.3. [Relative contra-indications for ECV](#)
5. [Tocolysis for ECV](#)
6. [Anaesthesia to facilitate ECV](#)
7. [Eligibility for planned vaginal birth](#)
8. [Management of breech that is first diagnosed in labour](#)
9. [Management of breech presentation in labour and birthing suite \(L&B\)](#)
10. [Supporting evidence](#)
11. [Associated Auckland DHB documents](#)
12. [Disclaimer](#)
13. [Corrections and amendments](#)

## 1. Purpose of guideline

This guideline establishes the care of women and their babies presenting with breech birth within Auckland District Health Board (Auckland DHB).

## 2. Introduction

Approximately 3 - 4% of singleton births involve a breech presentation. Experience with vaginal breech birth is reducing in “westernised” healthcare settings with the trend towards caesarean section (CS).

Vaginal breech births do still occur in Labour and Birthing Unit (L&B) including second twins. All practitioners need both an understanding of mechanisms of birth and the skills required for the safe conduct of such a birth.

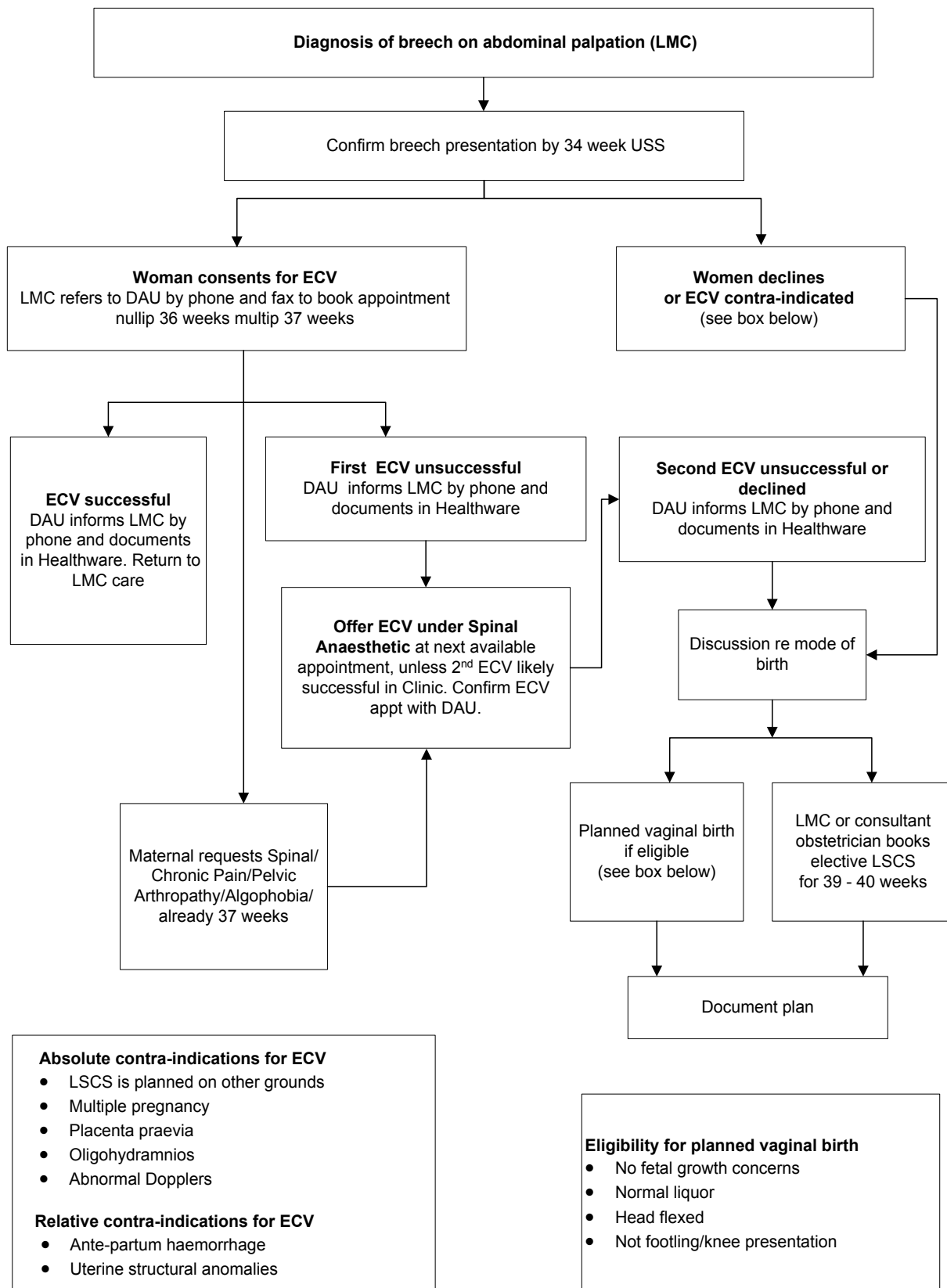
**Term breech trial** (see Hannah *et al.*, 2000 in [supporting evidence](#))

- overall absolute risk of perinatal mortality 1:200, morbidity 1:20
- risks of vaginal breech birth may have been overstated

With strict criteria before and during labour, planned vaginal birth of the singleton breech at term remains a reasonable option to offer to selected women (see Goffinet *et al.*, 2006 in [supporting evidence](#) for the PREMODA study group)

In order to individualise care, a full and frank discussion with the women and her partner on the risks of the vaginal breech birth and caesarean birth should be undertaken and documented.

### 3. Diagnosis of breech flowchart



## 4. External cephalic version (ECV)

ECV must be performed by suitably trained health professionals (obstetrician or midwife practitioner) where there is facility for emergency caesarean section if needed. There is low risk of complications, with approx. 0.5% requiring an emergency LSCS. The success rate was 49% at Auckland DHB in 2015.

Sixty-nine percent of women who had a successful ECV achieved a vaginal birth at Auckland DHB in 2015.

All women with a breech presentation at term, and no contraindication to ECV, should be informed about and offered ECV (RANZCOG).

### 4.1. Booking an ECV

- give patient the Auckland DHB pamphlet "[Turning Breech Babies or External Cephalic Version \(ECV\)](#)" to woman (can print off Auckland DHB website)
- At 34 weeks if known, or when diagnosed after 34 weeks, phone DAU to book ECV
- FAX to DAU
- Day assessment unit (DAU) Referral form (CR8791)
- Dating ultrasound scan (USS)
- USS confirming breech presentation
- An appointment should be organised for 36 weeks for nullips or 37 - 38 weeks for multips
- If > 38 weeks, an appointment should be organised as soon as possible

### 4.2. Absolute contra-indications for ECV

- LSCS is planned on other grounds
- Multiple pregnancy
- Placenta praevia
- Oligohydramnios
- Abnormal Dopplers

### 4.3. Relative contra-indications for ECV

- Ante-partum haemorrhage (dependent upon cause, severity and gestation at which APH occurred)
- Uterine structural anomalies (dependent upon anatomy)

#### Note:

- Previous caesarean section is **NOT** a contra-indication to ECV
- SGA with normal liquor and Dopplers is **NOT** an absolute contraindication to ECV

## 5. Tocolysis for ECV

Nifedipine, GTN or salbutamol may be considered at the discretion of the operating practitioner to provide uterine relaxation (Dufour *et al.*, 1997; Tan *et al.*, 1989; Wilcox *et al.*, 2011). Suggested dosing and monitoring are detailed in [Oxytocin \(Syntocinon\) for Induction and Augmentation of Labour](#) in [associated Auckland DHB documents](#).

## 6. Anaesthesia to facilitate ECV

Evidence from randomised controlled trials and meta-analysis suggests that the addition of an anaesthetic, but not analgesic, neuraxial block approximately doubles the success rate of ECV, independent of the superior comfort afforded by the anaesthetic.

### **Selection for anaesthesia-assisted ECV**

Because of the additional resources required and more medicalised atmosphere of an operating theatre compared to a clinic room, only women who fulfil one or more of the criteria below would normally be offered a spinal anaesthetic to facilitate their ECV:

- Failed ECV in outpatient clinic
- Advanced gestation (37/40 or above) at referral for ECV
- Women with chronic pain, in particular pelvic arthropathy
- Algophobia
- Refusal of ECV in outpatient clinic

### **Arranging an anaesthesia-assisted ECV**

The next available date for ECV with anaesthesia assistance should be confirmed by DAU. The case should be booked through the Elective Caesarean Section Booking Clerk, stating which date and time has been allocated by DAU. Estimated case duration is 45 minutes.

Ideally surgical consent should be taken at the time of booking.

The Pre Assessment Health Questionnaire CR2049 (see [clinical forms](#)) should be completed by the woman and faxed to the Level 9 Anaesthetic Department (ext. 25058). This will be reviewed by an anaesthetist prior to the ECV to reduce the risk of cancellation on the day of admission.

Patients do not need to attend the preop assessment clinic prior to their ECV. Unless there is potential for thrombocytopenia or other coagulation abnormalities, blood tests are not routinely required.

### **Fasting Instructions to be given to the woman**

- Water and/or clear oral fluids (up to 200mL/hour) can be drunk up to 2 hours prior to their report time.
- Otherwise, nothing orally for 6 hours

Ranitidine 150 mg tablets should be prescribed and given to the woman, one 150 mg tablet to be taken the night before the procedure and one x 150 mg tablet on the morning of the procedure. Reporting date and time should be recorded on the instruction leaflet in the spinal ECV pack, as no separate appointment letter will be sent.

### **Sequence of events**

The woman should report to Level 9 Operating Rooms on Day of Admission (ORDA) where anaesthetic consent will be obtained.

DAU will provide a midwife to facilitate CTG monitoring in the Post Anaesthesia Care Unit (PACU); Level 9 Operating Rooms will normally provide a midwife to assist the obstetrician with the procedure.

An Obstetric Ultrasound Machine and CTG monitor will be borrowed from Ward 91 for the duration of the ECV list.

## **Anaesthesia and Theatre procedure**

A dense anaesthetic block to cold to at least T6, and ideally T4 or above is recommended. This provides the necessary analgesia and abdominal wall muscle relaxation to facilitate the ECV, and provides surgical anaesthesia in the event of an emergency caesarean section being required.

Recommended intrathecal drugs (standard for CS):

- Heavy Bupivacaine 0.5% 2.1mLs (10.5 mg) to 2.7mLs (13.5 mg)
- Fentanyl 10 - 20 mcg
- Long acting intrathecal opioids are NOT RECOMMENDED and should not be administered.

An in/out urinary catheter is recommended at the end of the procedure. Intravenous fluids should be limited to avoid polyuria and bladder distension.

## **Post procedure monitoring**

The woman will be transferred to PACU. Continuous CTG monitoring will be undertaken by the DAU midwife, which can be discontinued after a minimum of 20 minutes if no abnormalities are detected. The CTG should be continued beyond 20 minutes and appropriate advice sought if it is abnormal.

It is vital to ensure normotension to maintain placental perfusion. Wedge of the women's hips or full left lateral position should be ensured at all times during the procedure and recovery.

Once the woman is stable and the CTG is discontinued, she can be transferred to the Transition Lounge. The woman can be discharged home from the Transition Lounge when she has:

- Voided effectively (consider urinary catheter if not voided 6 hours post-procedure)
- Taken food and drink without nausea/vomiting
- Able to mobilise independently without weakness or numbness

DAU should inform the LMC of the outcome of the ECV and ensure that appropriate counselling on mode of delivery has been undertaken. This should be communicated to the LMC by telephone and documented in Healthware.

## **7. Eligibility for planned vaginal birth**

- No fetal growth concerns
- Normal liquor
- Head flexed
- Not footling/knee presentatio

## 8. Management of breech that is first diagnosed in labour

Early diagnosis of breech presentation is imperative to enable optimal management. This involves an abdominal palpation and vaginal examination on admission.

Confirmation of presentation should be made by portable USS by a suitably trained person if there is any doubt.

Breech presentation in labour requires urgent referral for consultation, to consultant obstetrician on call.

In determining the preferred mode of birth, the consultant obstetrician should consider:

- management of breech presentation diagnosed in labour is **NOT** the same as the management of planned vaginal breech birth as per term breech trial
- gestational age and other eligibility criteria for vaginal breech birth as above
- whether caesarean section (CS) can be effected prior to spontaneous vaginal birth, without the need for undue haste that might further endanger the mother and the baby
- fetal well-being as determined by CTG
- increased fetal risks of vaginal breech delivery
  - possibility of undiagnosed congenital abnormalities
  - undiagnosed hyperextension of the fetal head (RANZCOG)
- increased maternal risks of emergency CS
- anaesthetic considerations such as no group and screen or the non-fasted woman
- potential technical difficulties delivering the fetus at CS if the breech is very low in the pelvis

All aspects of the discussion regarding mode of delivery in this context must be fully and contemporaneously documented.

- informed consent should be obtained from the woman
- best practice is a three way conversation between the woman, her LMC and the obstetrician

## 9. Management of breech presentation in labour and birthing suite (L&B)

See above section 8 for management of breech first diagnosed in labour (i.e. vaginal breech birth not previously planned).

On admission, consultation with the obstetric team on call is required.

For planned vaginal breech birth, do the following:

### Labour

- Advise and admit to L&B when in established labour
- Review birth plan and ensure competent personnel available
- IV luer, group and hold
- Clear Fluids only orally and Ranitidine prophylaxis as per ADHB policy "Ranitidine in Labour"
- Continuous CTG monitoring in established labour (FSE not contraindicated if required)
- Good support, adequate analgesia (inclusive of epidural) of the woman's choice

- Oxytocin (Syntocinon®) augmentation should only be used if advised by consultant obstetrician

## Birth

- Ensure full dilation confirmed by vaginal examination
- Availability of a suitably experienced obstetrician in the room during second stage
- Consider passive descent of breech into pelvis if epidural
- Neonatal staff members present at birth
- Anaesthesia team on call and clinical charge midwife (CCM) notified of imminent birth
- Plan should be re-evaluated if not born after 60 minutes of active pushing

## 10. Supporting evidence

- Auckland District Health Board. (2015). *National Women's Health Annual Clinical Report*. Retrieved [http://nationalwomenshealth.adhb.govt.nz/Portals/0/Annual\\_Clinical\\_Report\\_%202015%200%20NLIN.pdf](http://nationalwomenshealth.adhb.govt.nz/Portals/0/Annual_Clinical_Report_%202015%200%20NLIN.pdf)
- Dufour, P., Vinatier, D., & Puech, F. (1997). The use of intravenous nitroglycerin for cervico-uterine relaxation: a review of the literature. *Archives of gynecology and obstetrics*, 261(1), 1-7.
- Goffinet, F., Carayol, M., Foidart, J. M., Alexander, S., Uzan, S., Subtil, D., Bréart, D., & PREMODA Study Group. (2006). Is planned vaginal delivery for breech presentation at term still an option? Results of an observational prospective survey in France and Belgium. *American journal of obstetrics and gynecology*, 194(4), 1002-1011.
- Hannah, M. E., Hannah, W. J., Hewson, S. A., Hodnett, E. D., Saigal, S., Willan, A. R., & Collaborative, T. B. T. (2000). [Planned caesarean versus vaginal birth from breech presentation at term: a randomised multicentre trial](#). *The Lancet*, 356(9239), 1375-1383.
- Lavoie, A., & Guay, J. (2010). Anesthetic dose neuraxial blockade increases the success rate of external fetal version: a meta-analysis. *Canadian Journal of Anesthesia/Journal canadien d'anesthésie*, 57(5), 408-414.
- Khaw, K. S., Lee, S. W. Y., Kee, W. N., Law, L. W., Lau, T. K., Ng, F. F., & Leung, T. Y. (2015). Randomized trial of anaesthetic interventions in external cephalic version for breech presentation. *British journal of anaesthesia*, 114(6), 944-950.
- Kotaska, A. (2004). [Inappropriate use of randomised trials to evaluate complex phenomena: case study of vaginal breech delivery](#). *BMJ: British Medical Journal*, 329(7473), 1039.
- Kotaska, A., Menticoglou, S., Gagnon, R., Farine, D., Basso, M., Bos, H. *et al.*, & Murphy-Kaulbeck, L. (2009). Vaginal delivery of breech presentation. *International Journal of Gynecology & Obstetrics*, 107(2), 169-176
- New Zealand Resuscitation Council. ANCOR guidelines - Resuscitation of Newborns. Retrieved <http://www.nzrc.org.nz/policies-and-guidelines/>
- The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) (2010). [Breech: ten years on from the Term Breech Trial](#). *O&G Magazine* 12(4), 20-21.



- The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG). (2017). Management of Breech Presentation. Green-top Guideline No. 20b. Retrieved <http://onlinelibrary.wiley.com/doi/10.1111/1471-0528.14465/epdf>
- The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG). [Management of the Term Breech Presentation C-Obs 11](#) College statement
- Tan, G. W., Jen, S. W., Tan, S. L., & Salmon, Y. M. (1989). A prospective randomised controlled trial of external cephalic version comparing two methods of uterine tocolysis with a non-tocolysis group. *Singapore Med J*, 30(2), 155-158.
- Wilcox, C. B., Nassar, N., & Roberts, C. L. (2011). Effectiveness of nifedipine tocolysis to facilitate external cephalic version: a systematic review. *BJOG: An International Journal of Obstetrics & Gynaecology*, 118(4), 423-428.

## 11. Associated Auckland DHB documents

- [Access Holders in Women's Health](#)
- [Caesarean Section \(CS\) - Pre, Peri & Post-Op Care](#)
- [Fetal Surveillance Policy](#)
- [Oxytocin \(Syntocinon\) for Induction and Augmentation of Labour](#)
- [Ranitidine in Labour](#)
- [Postpartum Haemorrhage \(PPH\) Prevention and Management](#)

### Clinical Forms:

- [CR2049: Pre-Assessment Health Questionnaire](#)
- [CR8791: National Women's Health Day Assessment Unit Referral](#)

## 12. Disclaimer

No guideline can cover all variations required for specific circumstances. It is the responsibility of the health care practitioners using this Auckland DHB guideline to adapt it for safe use within their own institution, recognise the need for specialist help, and call for it without delay, when an individual patient falls outside of the boundaries of this guideline.

## 13. Corrections and amendments

The next scheduled review of this document is as per the document classification table (page 1). However, if the reader notices any errors or believes that the document should be reviewed **before** the scheduled date, they should contact the owner or the [Clinical Policy Advisor](#) without delay.