

### Guideline for the Management of Breech Presentation

**INITIATED BY:** Cwm Taf Morgannwg University Health Board

Obstetric and Gynaecology Directorate

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**FREEDOM OF INFORMATION STATUS**: Open

#### **Guidelines Definition**

Clinical guidelines are systemically developed statements that assist clinicians and patients in making decisions about appropriate treatments for specific conditions.

They allow deviation from a prescribed pathway according to the individual circumstances and where reasons can be clearly demonstrated and documented.

#### **Minor Amendments**

If a minor change is required to the document, which does not require a full review please identify the change below and update the version number.

Type of change	Why change made	Page number	Date of change	Name of responsible person
New for CTM	made			регооп

#### **Equality Impact Assessment Statement**

This Procedure has been subject to a full equality assessment and no impact has been identified.

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#### 1. Introduction

The incidence of breech presentation decreases from approximately 20% at 28 weeks gestation to between 3-4% at term. Spontaneous changes from breech to cephalic presentation occur with decreasing frequency as gestational age advances in the third trimester. Breech presentations are more likely to occur at all gestational ages in women who have previously given birth.

The aims of this guideline are:

- To provide guidance to the multidisciplinary team caring for a woman with a baby in a breech presentation.
- To identify the clinical management required for a woman with a breech baby giving birth at a CTMUHB hospital.
- To encourage individualised care and support for women with a breech presentation, thus improving both the experience and outcome for mother and baby.

#### 2. Definition

Breech presentation is when the baby's buttocks, foot or feet present instead of its head. Breech presentation is sometimes associated with uterine, placental, or fetal abnormalities.

## 3. Antenatal Management

Breech presentation does not become clinically significant until 36 weeks gestation. Women with confirmed breech presentation at or over 36 weeks gestation should be seen by their named Consultant to plan the mode of birth. Such management plans regarding birth should be discussed with the woman, enabling informed choice and documented in the woman's notes.

Women should be counselled thoroughly to ensure a proper understanding of both the benefits and risks of their options surrounding a breech presentation. This discussion should take into account an individual risk profile that includes a review of previous obstetric and medical history including their reproductive intentions.

#### Women should be informed that:

- Planned vaginal breech birth is associated with a 2 per 1000 births risk of perinatal mortality, versus cephalic birth (1 per 1000 births) and elective caesarean section (0.5 per 1000 births).
- Following a vaginal breech birth, there is an increased risk of low Apgar score at 1 minute of age and short term complications but not an increased risk of long term morbidity for the infant.

- There are fewer maternal complications, lower with a successful vaginal birth when compared with a planned caesarean section.
- Women in advanced labour with a breech baby should not be routinely offered caesarean section but must be counselled around the risks and benefits of breech vaginal birth.
- Epidural analgesia is not contraindicated for a vaginal breech birth but is associated with an increase in obstetric intervention.

#### **Selection of patients**

The following criteria should be met before vaginal birth is considered following a confirmed breech presentation at term:

- No independent indications for caesarean section (e.g. placenta praevia, severe IUGR)
- No evidence of antenatal fetal compromise
- The presentation on ultrasound scan is either frank (hips flexed and knees extended) or complete (hips flexed and knees flexed), but not footling breech (feet below the buttocks)
- No evidence of hyperextended neck on ultrasound
- Fetal weight not estimated to be high (more than 3.8kg)
- Fetal weight not estimated to be low (less than tenth centile)
- Presence of a clinician trained and competent in vaginal breech birth.

### 4. External Cephalic Version

External Cephalic Version (ECV) should be offered to all women whose babies are presenting by breech at 36 weeks for primigravida and 37 weeks for multips as per national guidance, provided there are no absolute contraindications for ECV (see Appendix 3).

#### **Eligibility for ECV**

There is no general consensus on the eligibility for ECV. Each case needs to be reviewed on an individual basis.

- Women should be informed that ECV after one caesarean delivery appears to have no greater risk than with an unscarred uterus.
- ECV is reasonable in the course of a stabilising induction for cephalic babies

*Note:* there is no upper limit of gestational age for an ECV.

- Inform women that the success rate of ECV is approximately 50%.
- Advise women on the risks and benefits of ECV and the implications for mode of birth.
- Inform women that few babies revert to breech after successful ECV.

- Women should be counselled that with appropriate precautions, ECV
  has a very low complication rate. Women must be counselled that
  although most women tolerate ECV, it can be a painful procedure and
  analgesia is offered.
- Women should be consented in writing by using Consent Form Referral
  is made to an appropriately trained senior obstetrician via Labour Ward
  and the ECV Proforma (see Appendix 3) should be filled by a midwife at
  booking over the phone and by an obstetrician during or after the
  procedure and signed.
- Cardiotocograph (CTG) should be performed before and after the ECV to confirm fetal wellbeing. The CTG should show evidence of 20 minutes of normal CTG before discontinuing.
- Ultrasound scanning should be performed prior to ECV to confirm malpresentation, fetal position, liquor volume and placental location. It should also be performed during the procedure for guidance and confirmation of successful ECV.
- The use of a tocolysis prior to procedure improves success rates of ECV and is therefore recommended.
- If ECV is unsuccessful, a second attempt may be made at a later date if
  the woman is in agreement. If tocolysis was not used for the first
  attempt it should be considered for any subsequent attempt. If still
  unsuccessful, the options of either planned vaginal breech birth or
  elective caesarean section should be re-discussed with the woman.
- It is important to ensure that ECV is performed on labour ward, where facilities for immediate delivery are available and theatre, anaesthetist and ODP are available before attempting ECV
- Rhesus Anti D should be administered to women where applicable

#### Absolute contraindications for ECV:

- Where caesarean is indicated for other reasons, e.g. placenta praevia major
- Placental abruption
- Severe pre-eclampsia
- Abnormal fetal Doppler
- Abnormal CTG
- Multiple pregnancy (except after delivery of a first twin)
- Rhesus isoimmunisation
- Current or recent (less than 1 week) vaginal bleeding
- Ruptured membranes
- Where the mother declines or is unable to give informed consent

# ECV should be performed with additional caution in the following situations:

- Oligohydramnios
- Hypertension

The Experts in Informed Consent (EIDO) ECV Patient Information Leaflet should be offered to all women considering ECV and can be found at the EIDO Download Centre by following this link:

**EIDO ECV Patient Information Leaflet** 

### 5. Vaginal Breech delivery

#### **Intrapartum Care - First stage of labour**

- On admission a senior obstetrician/consultant and delivery suite coordinator should be informed.
- Birth is recommended to take place on the delivery suite.
- IV access should be considered.
- To reduce the risk of cord compression, amniotomy is reserved for definite clinical indications and should be discussed with the senior obstetrician on duty. Amniotomy should not be performed to ascertain the type of breech presentation (i.e. to exclude a footling breech).
- An ultrasound and vaginal examination should be performed on admission in labour. Please refer to patient selection criteria.
- Induction or augmentation of labour for a breech presentation is not usually recommended to be discussed with the consultant on-call.
- Caesarean section should be considered when progress in the first stage is slow.
- As with cephalic presentations, an epidural may be considered by the woman as an option for pain-relief in birth. Epidural should not be clinically mandated for the reason of a breech presentation alone.
- As with cephalic presentation, the woman should be encouraged to be active, mobilise and adopt upright positions throughout the labour and/or birth. This facilitates physiological birthing principles.
- For cases where the woman is choosing to have an active breech birth.
   The most experienced midwife should be allocated to care for the woman.

#### **Intrapartum Care - Second Stage of Labour**

To assist with the management of the vaginal breech the facilitator must:

- 1. Understand the mechanism of vaginal breech birth.
- 2. Avoid unnecessary intervention.
- 3. Use timely intervention if the normal breech birth mechanism does not occur.
- A senior obstetrician should be present during the active 2<sup>nd</sup> stage of labour.
- A passive second stage to allow descent of the breech to the perineum is recommended. A two hour passive descent is recommended providing there is no fetal compromise, signs of infection or any other reason for imminent birth.
- Caesarean section should be considered if there is delay in the descent of the breech in the second stage.
- The on-call anaesthetist and neonatal team should be notified on confirmation of the second stage of labour.
- The choice of position should be a maternal one, however, the preference of the practitioner should also be considered.

### 6. Management of term breech

#### Delay with the arms

- If the woman is in the supine/lithotomy position and the arms do not deliver spontaneously, once the scapula is visible, gentle pressure in the antecubital fossa will cause the arm to flex and deliver spontaneously. If no scapula is seen it is likely to be a nuchal arm; this requires a rotational manoeuvre to release the anterior arm.
- If in all fours position you should enter the vagina behind the shoulder and run along the arm until the antecubital fossa is felt and sweep the arm down, this should always be the anterior arm as this is the correct mechanism for breech birth and the arm that will cause the complication. Once the anterior arm is born the same can be done for the posterior arm if needed.
- In the case of nuchal arms, Lovset's manoeuvre is advised. Again this
  is an anterior arm problem; baby will need to be rotated to sacrum
  posterior to release the arm and sweep it down before rotating baby
  back to 'tum to bum' or sacrum anterior. This can be done easily in an
  all fours position.

#### The after-coming head

- Once the nape of the neck (i.e. baby's hairline) is visible, preparation should be made to deliver the 'after coming head'. This is achieved by:
  - 1. Mauriceau-Smellie-Veit manoeuvre
  - 2. Bracht manoeuvre
- Use of low forceps ('Piper, Anderson's or Neville Barnes')
- In cases where the nape of the neck is not seen, this is likely an impacted head (either the sinciput on the sacral prominence or the occiput on the pubic ridge – more likely with dolicocephaly). The principle of 'elevate and rotate' should be used to resolve an impacted head.
- Similarly, with an upright breech birth and an impacted head, you would see a puffed out chest. 'Elevate and rotate' should be used in the all-fours position to resolve this complication.
- Shoulder press can be used in the all fours position to help with the birth of the head.
- Delivery using the Burns-Marshall technique is no longer advised due to concern of over extension of the fetal neck causing permanent cervical nerve damage.

#### Following the birth

- After the birth, if there are any injuries to the mother or the baby, an Incident Reporting Form (Datix) should be completed.
- Ensure excellent documentation. It is useful to have a scribe present for the birth. Document colour, tone, cord state and liquor colour during the birth.

#### Fetal Monitoring in Labour for breech presentations

- CTG monitoring should be offered.
- Fetal blood sampling from the buttocks in labour is not advised.
- If any fetal concerns, discuss with consultant obstetrician

## 7. Management of preterm breech

- Evidence regarding term breech should not be extrapolated directly to preterm breech birth.
- Routine caesarean section for spontaneous breech preterm labour is not recommended.
- Mode of birth for preterm delivery should be individualised to the woman and her partner based on stage of labour, type of breech presentation, maternal and/or fetal wellbeing and availability of a skilled operator in vaginal breech birth.

- Caesarean section at the threshold of viability (22-25+6 weeks of gestation) is not routinely recommended.
- Labour with a preterm breech should be managed as with a term breech.
- It is particularly important for pre-term breech deliveries that the second stage (full dilatation) is confirmed by vaginal examination before pushing.
- If unable to prevent pushing before full dilatation then an epidural should be encouraged.
- If there is head entrapment during a pre-term (or term) breech delivery, lateral incisions to the cervix should be considered, with or without tocolysis

### 8. Management of twin breech

- Women should be informed that the evidence is limited, but that planned caesarean section for a twin pregnancy where the presenting twin is breech is recommended.
- Routine caesarean section for breech presentation of the second twin is not recommended in either term or preterm deliveries.
- There is insufficient evidence to support the routine delivery of the second twin in breech presentation by Caesarean section.
- Routine emergency caesarean section for a breech first twin in spontaneous labour is not recommended. The mode of delivery should be individualised based on cervical dilatation, station of the presenting part, type of breech presentation, fetal wellbeing and availability of an operator skilled in vaginal breech birth. Refer To twin guideline.

# 9. Undiagnosed Breech

- Where a woman presents with an undiagnosed breech in labour, discussion with the woman should take place regarding mode of birth.
- Management should depend on the stage of labour, whether factors associated with increased complications are found (see <u>selection of</u> <u>patients</u>), availability of appropriate clinical expertise and ability to gain true informed consent.
- Women presenting in advanced labour with undiagnosed breech presentation should be counselled regarding the risks and benefits of vaginal breech birth and emergency Caesarean section (in advanced labour e.g. late first stage or second stage of labour) to enable them to make an informed choice.
- Women near or in second stage of labour should not be routinely offered caesarean section.

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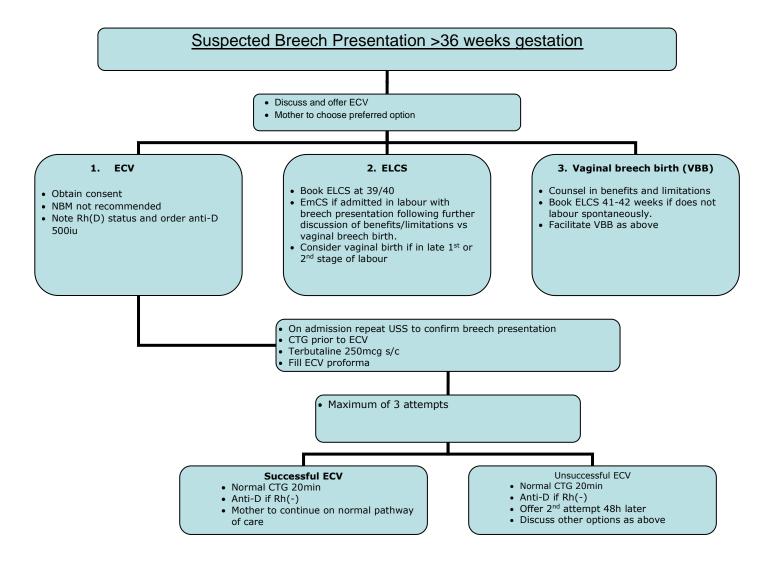
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# 11. Appendix 1: Vaginal Breech Birth Documentation Proforma

VAGINAL BREECH BIR									
Date		_							
Person completing for									
Designation									
Signature:  Time of confirmation of	of broom	h nroce	ntation:			Planned vaginal bree	sch Unnlan	ned va	ginal breech
Time of committation c	n breet	ii prese	illation.			(please circle)	cii Olipiali	iieu va	igiliai breecii
VE Findings at diagnos	is:					Time called for assist	tance:		
Time of confirmation of full dilatation:				Time bladder emptied: Volume:					
Maternity team preser	nt at bii	th:				Additional staff atter	nding:		
NAME				ROLE		NAME ROLE			
	1				Т		,		1
Maternal position for									Other:
birth: (please circle)		mi-	Lithotomy	Side	All	Kneeling	Standing Sq	uatting	g
	recui	mbant		lying	fours				
Time baby's buttocks v	/isible:					Fetal heart Rate:		CTG /	Doppler
Time busy 5 succession 1								-	cal (please circle)
The second secon		d.				F-1-1-1-1			
Time active pushing co	mmen	cea:				Episiotomy (if requir	ea):		
Time baby's buttocks k	orn:					Fetal heart Rate: CTG / Doppler			
						CTG: Normal Suspicious Pathological (please circle)			
							10. 16.		
Time baby's legs release Time baby's umbilicus		walicad	i.			Pressure applied to popliteal fossae to assist release of baby's legs: Yes / No			
-	IIISt VIS	1		1					
Position of breech:		Sacro-	-Anterior	Sacro-	_	Controlled rotation of baby (holding over bony prominence			
				Poster	ior	of pelvis) to sacro-anterior: Yes / No			
Time baby's arms relea	ased:					Lovset manoeuvre to release baby's arms: Yes / No			
Time nape of the neck	visualis	sed:				Head advancing: Yes / No (please circle)			
Mode of birth of baby'			-						
Spontaneous Mauriceau-Smellie-Veit manoeuvre					Assisted with		1	forceps	
Time of birth of baby:				Suprapubic pressure	applied: Yes /	No	(please circle)		
Neonatologist present: Yes / No (please circle)			Neonatologist name	:					
Time arrived				1					
APGAR scores 1 min:				5 mins:	10 mins:				
Cord gases:		Art pl	l:	Art BE:	:	Venous pH:	Venous I	BE:	
Baby admitted to NICU: Yes / No (please circle)				Parents/staff debrief	fed: Ye	s / No	(please circle)		
Time:				Datix Incident Form completed: Yes / No (please circle)					
				Datix Incident Form	No:				

# 12. Appendix 2: Management of Breech Flowchart



# 13. Appendix 3: ECV proforma



Patient name:
Hospital number:
DOB: Address:

# **ECV Booking Proforma**

Booking Date:	······································	Date of ECV:				
Booked by:		Booking taken by:				
EDD:	Parity: G	Р	Gestational age at ECV:			
Previous c-sectio	ns: <u>number</u>	Rh	☐ Positive	☐ Negative		
AFI: 🗆 Normal	I □ Oligohydramnios	□Ро	lyhydramnios			
BMI:	ECV Leaflet given □					
Any contraindications?						

Absolute	Relative		
Where caesarean is indicated even if	☐ Significant third trimester haemorrhage in previous		
presentation is cephalic	pregnancy.		
Placental abruption	☐ Evidence of 'placental dysfunction' (e.g. significant		
Severe pre-eclampsia	small for gestational age or oligohydramnios).		
Abnormal fetal Doppler	☐ Serious fetal anomaly.		
Abnormal CTG	Oligohydramnios.		
Multiple pregnancy (except after	Unstable lie (unless as part of a stabilising		
delivery of a first twin)	induction).		
Rhesus isoimmunisation	☐ Previous uterine surgery (data on safety after one		
Current or recent (less than 1 week)	caesarean section is reassuring but limited).		
vaginal bleeding	☐ Women on treatment doses of Clexane should have		
Ruptured membranes	their ECV performed in discussion with the		
Where the mother declines or is unable	operator at a time interval closest to the trough		
to give informed consent	level of anticoagulation.		

Turn over for procedure

# Appendix 3: ECV proforma (cont'd)

# **ECV Procedure**

Operator: CTG: □ Normal □	] Suspicious □ Pa	athological <b>Remarl</b>	ks:				
Ultrasound scan Fetal heart seen □ AFI							
Fetal Lie	Presentation	Position	Placenta				
☐ Longitudinal	□ Breech	□ Left	☐ Anterior				
	o Frank	☐ Right	☐ Posterior				
☐ Transverse	o Complete	☐ Anterior	☐ Fundal				
☐ Oblique	○ Footling	□ Posterior	☐ Lateral				
	☐ Cephalic		□ Praevia				
Patient's Consent:							
Operator's Name		Signaturo					