WOMEN'S HEALTH AND PAEDIATRICS

MATERNITY UNIT

Management of Breech Presentation including External Cephalic Version

Amendments			
Version	**Date**	**Comments**	**Approved by**
2	April 2007	Paragraphing on Managing unexpected and imminent breech birth in the rare cases where emergency obstetric assistance cannot be secured added	Women's Health Clinical Governance Committee
3	Sept 2012	Whole document review	Women's Health Guideline Group
3	Feb 2018	Whole document review – no changes	Head of Midwifery
4	May 2018	Whole document refresh to align with latest NICE recommendations	Women's Health Guideline Group
5	Jan 2021	Whole document refresh to align with latest RCOG and NICE recommendations	
6	Sept 2022	Paragraphing on managing the aftercoming head in a vaginal breech birth	Perinatal guidelines group
7	February 2023	Addition of information on remaining as an inpatient when breech detected during IOL or when attending at 40+0 or later	Rapidly ratified by Perinatal Guidelines group

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Ratified by: Perinatal Governance Group

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Next review date: **May 2024**, or if legislation, national guidance or lessons learnt indicate an earlier review

Target audience: All health professionals within the maternity services

Equality impact assessment: Perinatal Governance Group

Comments on this document to: Perinatal Governance Guideline Group

Contents

Abbreviations

CS	Caesarean Section
CTG	Cardiotocograph
ECV	External Cephalic Version
EFW	Estimated Fetal Weight
ELCS	Elective caesarean section
IOL	Induction of labour
LW	Labour Ward
PROMPT	Practical Obstetric Multi-Professional Training
VBAC	Vaginal birth after Caesarean Section

Management of Breech Presentation including External Cephalic Version

1.0 Introduction

The incidence of Breech presentation is 20% at 28 weeks and reduces to 4% at term.

2.0 Antenatal management

Ideally women presenting with breech presentation will have had a departmental ultrasound scan (for EFW, liquor volume and placental site) and be assessed and counselled antenatally regarding mode of delivery at around 36 weeks gestation. Women with breech presentation should be offered an ECV unless there is an absolute contraindication (see Section 3.1)

	ECV	**Vaginal breech birth**	**Elective Caesarean Section**
Risks	Some discomfort 0.5% chance fetal distress	Lower APGARs Increased neonatal complications (neurological complications, joint dislocation, fractures) 40% chance of needing emergency CS	As per Elective CS guidance. Consider increased risks in future pregnancies
Advantages	50-70% chance of success – aim for normal vaginal birth thereafter	Less maternal complications	Slight reduction in perinatal mortality and early neonatal complications compared to Vaginal breech birth
Issues to consider	Possible if aiming VBAC after 1 CS	IOL usually not recommended Augmentation in carefully selected circumstances only	To be performed at 39 weeks unless indicated sooner.

Advise that about 20% will spontaneously turn to cephalic presentation in the late third trimester, so a presentation scan will be needed prior to ECV, or Caesarean section, as well as in early labour.

If a breech presentation is found during an induction process then a category 3 caesarean section will need to be carried out whilst the patient is still an inpatient.

If a breech presentation is found at or beyond 40+0 when attending for any reason the patient should be admitted and remain as an inpatient if a category 3 caesarean section is the planned mode of delivery.

3.0 External Cephalic Version

3.1 Counselling

- ECV has a low complication rate with appropriate case selection and monitoring. Immediate CS may be needed in 1 in 200 cases
- Transient issues: Fetal bradycardia and non- reactive CTG – these almost always resolve spontaneously
- Risks - Placental abruption, Cord entanglement, uterine rupture, feto-maternal haemorrhage
- Does not appear to promote labour, no evidence of increase in morbidity and mortality
- No evidence of increased risk after 1 CS compared to unscarred uterus

Absolute contraindications	**Relative contraindications**
Multiple pregnancy (except delivery of 2nd twin)	Ruptured membranes
Placenta Previa	Suspected IUGR/Oligohydramnios
Major uterine anomaly	Morbid obesity
Abnormal CTG	Major fetal anomaly
Rhesus Iso-immunisation	Unstable lie
Current/recent bleeding	
Mother declines or is unable to give consent	
Any other absolute indication for CS delivery	

3.2 Booking

Call the Labour ward co-ordinator (ext 2864) who will book in the Labour Ward diary, on a day that an Obstetric Consultant with experience of ECV can perform the procedure.

Aim to book in the 36th week for primiparous and 37th week for multiparous mothers. Document the booking as an appointment in BadgerNet.

There is no reason for the woman to be fasted prior to ECV.

3.3 Procedure

On admission, perform a CTG for at least 15 minutes and bedside ultrasound. An assistant may perform ultrasound intermittently to assess progress and fetal heart rate. The procedure should be planned in conjunction with LW activity so that Emergency CS may be performed within 30 minutes.

If normal, and US confirms breech presentation then proceed to give a tocolytic to promote uterine relaxation:

1st line: Terbutaline 250mcg or 500mcg sc *or*
2nd line: Nifedipine 10mg po

Women should be advised that these may cause transient maternal tachycardia, palpitations, tremors and headache.

After 15-20 minutes, start the procedure by grasping each end of the fetal pole.

Elevate the breech out of the maternal pelvis (may be assisted by Trendelenburg position). Then gently guide the buttock towards maternal fundus as head is directed downwards in a “forward roll”. If unsuccessful, consider a “back flip”. Each attempt should last no longer than 5 minutes. Abandon further attempts if the mother is distressed, fetal bradycardia or there are multiple failed attempts (usually no more than 3 attempts).

3.4 Care after ECV

Perform CTG for a minimum of 20 minutes – reactive normal CTG should be obtained. A computerized CTG may be performed, in which case this can be stopped when Dawes-Redman criteria is met.

Check Rhesus status – If negative then perform Kleihauer test and offer Anti-D

If ECV is successful – discharge back to previous care pathway. If unsuccessful – counsel again regarding planned elective CS from 39 weeks gestation or a possible vaginal breech birth.

4.0 Breech labour and delivery

Induction of labour is not usually recommended with a breech presentation.

4.1 Diagnosis in labour

If Elective CS is planned and the woman is admitted in labour, confirm presentation by performing a scan prior to CS. Timing of CS is dependent on duration of fasting and stage of labour.

If Breech presentation is diagnosed in labour, she should be seen by the labour ward Registrar and counselled with regard to ELCS or breech vaginal delivery; taking into account the patients’ wishes. Ideally a scan should be performed to check the fetal position prior to delivery.

Women near or in active second stage of labour should not be routinely offered a caesarean section.

All discussions must be documented in the noted and discussed with the Labour Ward Consultant or On-Call Obstetric Consultant.

4.2 Vaginal Breech birth

4.2.1 Unfavourable factors for vaginal breech birth

- footling or kneeling breech presentation
- large baby (>3800 g)
- growth-restricted baby (< 2000g or <10th centile)
- hyperextended fetal neck in labour (diagnosed with ultrasound) – 'star-gazing' fetus
- other contraindications to vaginal birth (e.g., placenta praevia, fetal compromise)
- lack of presence of a clinician trained in vaginal breech delivery
- previous caesarean section.

4.2.2 Intrapartum management

The practitioner responsible for labour management and delivery of the breech baby should be the most senior clinician available, and skilled in the delivery of the breech. This will usually be the Labour Ward Registrar or Consultant, but in their absence the most senior midwife available will be responsible if birth is imminent. All practitioners must have appropriate training, which should include simulated training (PROMPT).

The Labour Ward Consultant or On-Call Consultant should be called to attend immediately once a primip is fully dilated or multip is >5cm dilated. They are expected to be on the labour ward, though not necessarily in the delivery room. The Anaesthetist, Paediatrician and ODP should be present on Labour Ward at the time of birth.

Delivery should not take place in the Midwifery led unit. Birth can take place in a delivery room or operating theatre at the discretion of the obstetrician, but does not routinely need to be in theatre.

4.2.3 Analgesia

Women have choice of analgesia during labour and birth. Epidural analgesia should not be routinely advised, and women should be advised that epidural analgesia is likely to increase the risk of intervention. Epidural top up at fully dilated is not contraindicated.

If epidural analgesia is not in use, then consider pudendal block and perineal infiltration of local anaesthetic at the time of birth.

The use of the birth pool for analgesia is contraindicated.

4.2.4 First stage of labour

Continuous CTG should be offered to women with breech birth in labour. If pathological**, Fetal Blood Sampling cannot be performed**, so CS should be advised.

As there is a higher risk of CS compared to cephalic presentation, preparations should be made accordingly, including but not limited to IV access, pre-medication with anti-emetics and antacid preparation as per protocol.

Progress in labour should be monitored closely, ideally with 4 hourly vaginal examinations. If progress is delayed, then the Registrar must be informed to assess, and further management discussed with the Obstetric Consultant.

The woman and her midwife will decide on positions during labour and birth. Delivery either in the semi-recumbent or all-fours position can be planned. If the woman is planning to deliver in the all-fours position, she should be aware that she may need to turn over if assistance is required for delivery, as it can be difficult to perform the required manoeuvres in the all-fours position. However, manoeuvres are less likely to be required in the first place in the all-fours position.

4.2.5 Second stage of labour

Full dilatation must be confirmed by vaginal examination. Once confirmed, the clinicians can agree who will deliver the baby.

A scribe and the neonatal team should be present for birth.

A delivery pack should be ready, with a pair of forceps available in the room. Operators should use the instrument (forceps) they are most familiar and experienced with.

If there is an effective epidural in place, then 1 hour for passive descent may be allowed before the labouring mother starts to push. Adequate descent in the second stage is a pre-requisite for encouragement of the active second stage. Do not encourage pushing until the breech is visible – if no descent or the breech is not visible after 1 hour, then the Obstetrician should review and reassess the plan for vaginal breech birth. The Consultant Obstetrician should be involved in this plan.

When the buttocks are distending the perineum, consider mediolateral episiotomy (with appropriate analgesia). Once the buttocks deliver, significant cord compression is common.

The aim is to support and restore physiological birth – do not pull

- Delivery from buttocks to umbilicus should take no longer than 2 minutes
- Delivery from umbilicus to head should take no longer than 3 minutes.

In the event of delay or evidence of fetal compromise assistance will be required, but this should be without traction. All attending obstetricians and midwives should be familiar with techniques that can assist with vaginal breech birth. The choice of manoeuvres used depends on individual experience of the attending clinician. Care should be taken with all manoeuvres to avoid fetal trauma: the fetus should be grasped around the pelvic girdle rather than the abdomen, and the neck should never be hyperextended.

Provided there is progress with each contraction, keep hands off the breech and encourage maternal effort. Do not pull down on a loop of cord. Do not discourage involuntary pushing once the buttocks have emerged.

Delivery of the buttocks – the anterior buttock is usually born first, and then the posterior buttock sweeps the perineum by lateral flexion of the fetal body. The baby then rotates to sacrum anterior.

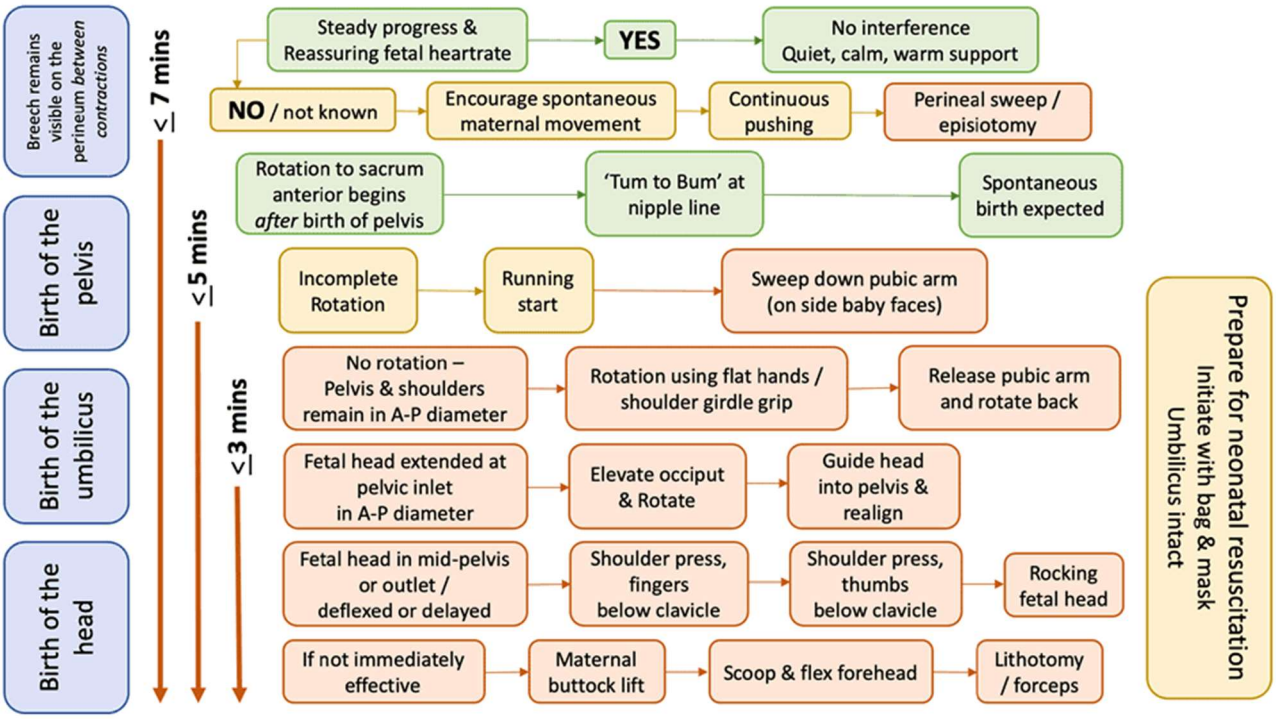
Legs - If the legs do not deliver spontaneously, (usually extended knees), apply gentle popliteal pressure and flex with abduction. This should not be done routinely, as the stretching of perineum by the feet may help delivery of the head later on.

Shoulders and Arms - If the shoulders do not deliver spontaneously, consider a change of maternal position. If the fetal axilla is seen due to extended arms, then Lovset's manoeuvre should be performed to facilitate delivery: Once the scapula can be seen, grasp the bony pelvis with thumbs on the sacrum and rotate to the oblique position to engage the arm. Then sweep the anterior/pubic arm down across the chest by inserting a finger over the shoulder. Repeat the same in the opposite direction.

Head - Flexion is essential for delivery of the head. If after the nape of the neck is seen, delivery does not occur with gentle maternal effort, then assess to see if the head is extended. If so, perform the Mauriceau-Smellie-Veit manoeuvre. This is a two-handed approach whereby the middle finger of one hand applied pressure to the occiput, with the adjacent fingers applying minimal traction to the shoulders. The other arm supports the body, with the index and ring fingers applying mild traction to the maxillae.

If forceps are required for the after coming head, then the available national guidance does not specify the forceps of choice. Operators should use the instrument (forceps) they are most familiar and experienced with. The woman will need to adopt the semi-recumbent or lithotomy position. An assistant is required to hold the fetal body up while the blades are applied, and during traction by the Obstetrician. The assistant will then "catch" the baby as the head delivers.

If there has been a delay in the delivery of the head with the operators most familiar choice of forceps then consideration should be given to using another type of forceps that the operator is familiar with to expedite delivery.



4.2.6 Preterm labour with breech presentation

Routine CS for breech presentation in spontaneous preterm labour is not recommended. Mode of delivery should be individualised based on all the previously described factors.

CS for breech presentation at the threshold of viability (22-25+6 weeks gestation) is not routinely recommended.

Elective (Category 3 or 4) CS section is usually recommended for preterm breech presentation due to maternal and/or fetal compromise.

If there is head entrapment during a pre-term delivery, lateral cervical incisions at the 02:00 and 10:00 positions should be considered by a suitably qualified practitioner.

4.2.7 Third stage

Third stage management should be as per the Care in labour guideline. If requested, women at low risk of PPH may be supported in having a physiological third stage if there has been minimal intervention prior to delivery of the head

After delayed cord clamping, the umbilical cord should be double clamped and paired cord blood samples obtained

5.0 Paediatric follow up

All babies born in the breech position after 36 weeks gestation (vaginal or CS) must have an outpatient ultrasound within 4 weeks of birth.

NIPE assessment shortly after birth should identify unstable hips. If identified, then the baby should have an urgent ultrasound assessment of the hips within 2 weeks to exclude congenital hip dislocation.

References

1. Impey, LWM, Murphy, DJ, Griffiths, M, Penna, LK on behalf of the Royal College of Obstetricians and Gynaecologists (2017) External Cephalic Version and Reducing the Incidence of Term Breech Presentation. *BJOG* 124: e151-e177
2. Impey, LWM, Murphy, DJ, Griffiths, M, Penna, LK on behalf of the Royal College of Obstetricians and Gynaecologists (2017) Management of Breech Presentation. *BJOG* 124: e151-e177
3. Intrapartum Care for healthy women and babies. NICE Clinical guideline [CG190] (2017)
4. Walker, Shawn (2020). No more 'hands off the breech'. *The Practising Midwife* 23: 6