

Management of Breech Presentation

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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.

Following the publication of a large international multicenter study, known as the Term Breech Trial (Hannah et al, 2000), the incidence of vaginal breech birth in the United Kingdom (UK) greatly declined and a recommendation of planned Caesarean birth for breech presentation was routinely adopted. In addition, this research also contributed to a loss of practitioner skill and confidence in facilitating vaginal breech births further impacting the frequency of women being offered this option.

In more recent years, however, further research now suggests vaginal breech birth should be an option offered to women presenting with a baby in the breech position. The updated RCOG (2017) guideline states that, with appropriate case selection of pregnancies, together with an experienced clinician, vaginal breech birth can be nearly as safe as vaginal cephalic birth.

The following guideline outlines what is deemed a suitable pregnancy for vaginal breech birth, the referral pathway and the clinical management of breech presentation including antenatal care, women's options and management for labour and birth, whether these are planned or undiagnosed breech presentations.

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. All women suspected of having a breech presentation at 36 weeks gestation or more should be referred to the Day Assessment Unit for a presentation scan to confirm fetal presentation. If non-cephalic presentation is confirmed, the woman should be referred for a departmental ultrasound scan (USS) and review arranged if breech presentation is confirmed.

The departmental USS will:

- Confirm breech presentation
- Determine the type of breech presentation (e.g. flexed (complete), extended (Frank), incomplete, kneeling or standing (footling) presentation)
- Measure Amniotic fluid index (AFI)
- Exclude fetal or uterine anomalies
- Determine placental location
- Determine estimated fetal weight
- Refrain from discussing management plan with the woman

Women with confirmed breech presentation at or over 34 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. Use the flowchart in <u>Appendix 2</u> as a guide.

Women should be counselled in an unbiased way that ensures a proper understanding of both the absolute and relative risks of their options surrounding a breech presentation (Appendix 8). This discussion should take into account an individualised assessment that includes a review of previous obstetric and medical history including the woman's reproductive intentions. Women should be given information regarding all their options:

- ECV
- Planning a vaginal breech birth
- Planning a Caesarean birth

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 birth (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 birth.
- Women in advanced labour with a breech baby should not be routinely offered caesarean birth but must be counselled around the risks and benefits of vaginal breech birth (Appendix 8).
- Epidural analgesia is not contraindicated for a vaginal breech birth but is associated with an increase in obstetric intervention.

This counselling should be conducted by an appropriate healthcare professional and documented in the woman's hand held records so it is available for the woman to refer back to. The breech presentation leaflet should also be provided to supplement the verbal information.

Selection of women

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

- No independent indications for Caesarean birth (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 (standing) breech (feet below the buttocks)
- Presence of a clinician trained and competent in vaginal breech birth

Extra consideration to suitability for vaginal birth should be given if:

- Evidence of a hyperextended neck on ultrasound (if possible to identify)
- Fetal weight estimated to be high (more than 3.8kg)
- Fetal weight estimated to be low (less than tenth centile)

Options and Ongoing Management

- Plan VBB:
 - \circ Continue routine care
 - $\circ~$ Provide verbal and written information on the benefits and limitations of this option
- Plan Caesarean:
 - Give written information on LSCS, (RCOG leaflet on "Information for You: Choosing to have a Caesarean Birth")
 - Book a LSCS from 39/40
 - Ask the woman to book a pre-assessment appointment or complete it if surgery is scheduled within 2 days
- The plan should be documented in the woman's notes and asked to seek medical advice if any concerns arise (e.g. PVB, change in pattern of fetal movements).

4. External Cephalic Version

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

External Cephalic Version (ECV) should be offered to all women whose babies are presenting by breech at 36 weeks or over, provided there are no absolute contraindications for ECV (see <u>Appendix 3</u>). Women should be advised on the benefits and limitations of ECV and the implications for mode of birth.

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 ECV can be performed in early labour provided the membranes are intact.

- Inform women that Spontaneous version rate after 36 weeks is 8% and 3-7% after unsuccessful ECV (Impey et al, 20171).
- Inform women that ECV reduces the chance of non-cephalic presentation at term (RR 0.42), increasing the chance of vaginal cephalic birth (Impey et al, 20171).
- Inform women that 3-4% of babies revert to breech after successful ECV.
- Following successful ECV there is up to an 80% chance of the woman having a vaginal birth. ECV will give the mother the best opportunity of a successful vaginal birth
- Following successful ECV, there is still a 20% chance the woman will require an unplanned Caesarean birth in labour, compared to 10% chance if the baby self-reverts to a cephalic presentation (Impey et al, 20172).
- ECV has not been shown to improve outcomes for babies.
- Women should be counselled that with appropriate precautions, ECV has a very low complication rate. However they should be alerted to any possible complications.
- Rare complications include placental abruption, fetomaternal haemorrhage.
- Risk of emergency Caesarean birth within 24hours is approximately 0.5% (90% if there is vaginal bleeding or abnormal CTG following the procedure).
- Randomised trials have shown no increase in neonatal mortality or morbidity following an ECV.
- Women must be counselled that although most women tolerate ECV, it can be a painful procedure and analgesia is offered.
- Women should be consented verbally or in writing by using Consent Form 1.
- Referral is made to an appropriately trained senior obstetrician via Labour Ward and the ECV Form (<u>Appendix 3 p.1</u>) should be filled by a midwife at booking over the phone, and (<u>Appendix 3 p.2</u>) by an obstetrician during or immediately after the procedure.
- Computerised CTG should be performed before and after the ECV to confirm fetal wellbeing.
- 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 Terbutaline 250mcg SC prior to procedure improves success rates of ECV and is therefore recommended. If Terbutaline is contraindicated (significant cardiac disease or hypertension, will not be effective in those taking beta-blockers) oral Nifedipine 20-30mgs (not slow release) may be given as an alternative option.
- The woman should be informed of the side effects of Tocolysis prior to administration maternal palpitations, tachycardia, flushing, tremor and occasional nausea may be experienced.
- The ECV procedure may need to be stopped if the patient is unable to tolerate it as it may indicate a complication.

- 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 after the procedure where applicable.
- 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 birth should be re-discussed with the woman.
- all women should be made aware that they should contact triage if they experience abdominal pain, change in fetal movements, vaginal bleeding and onset of labour.
- Women with a CTG that is not normal following the procedure should be admitted.
- Women who decline a second ECV or have had an unsuccessful repeat ECV should be counselled (<u>Appendix 8</u>) on the benefits and limitations of planned vaginal breech birth (VBB) versus planned Caesarean birth by an appropriate practitioner

If ECV is successful:

- A routine appointment should be made for ongoing antenatal care.
- A bedside USS in DAU or on the ward should be offered one week following the ECV to ensure the baby has remained in the cephalic presentation to enable the woman a further opportunity to repeat ECV if she wishes or consider her options for mode of birth.

Suitability for ECV

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

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

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 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:

http://dc.eidohealthcare.com/processform.php?form=login&username=NGL&pass word=consent11&terms=accepted

5. Vaginal Breech Birth

5.1. Intrapartum Care - First stage of labour

- On admission a senior obstetrician/consultant and delivery suite co-ordinator should be informed.
- Birth is recommended to take place on the delivery suite.
- IV access is not a standard recommendation there is no increased risk of postpartum hemorrhage. Whilst research suggests there is a 40% chance of an unplanned Caesarean birth, the majority of these are category 2 and 3 meaning there is time to cannulate, obtain bloods and offer pre-meds.
- To reduce the risk of cord compression or prolapse, 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 a vaginal examination should be performed on admission in labour to ascertain:
 - (A) position of baby;
 - (B) ensure buttocks are engaged in the pelvis.
 - Please refer to patient selection criteria.
- Induction of labour is not generally recommended if a woman's baby is in the breech presentation. If external cephalic version is unsuccessful, declined or contraindicated, and the woman chooses not to have an elective Caesarean birth, induction of labour should be offered, if delivery is indicated, after discussing the associated risks with the woman (NICE, 2008).
- If labour is not progressing as expected (be aware that breech labours tend to be quicker even if they are primiparous) a Caesarean birth should be considered. Augmentation is not recommended in the first stage of labour.
- Epidural analgesia is not contraindicated for breech presentation in labour however, a low dose is recommended to enable the woman to remain mobile. Women should be aware that epidural analgesia increases the chance of intervention and with breech presentation that is likely to be a Caesarean birth.
- 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. An experienced breech practitioner should be in attendance supporting the clinician facilitating the birth.
- In instances where there are no experienced breech practitioners available, the woman must be informed to enable them to make a decision regarding mode of birth.

5.2. 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.
- 4. Limit personnel in the room to only those who are required to be present (experienced breech birth facilitator, obstetrician trained to use forceps for the after-coming head if required, ANNP or neonatal SHO).
- 5. Use appropriate manoeuvres/interventions if there is arrest of descent of the breech at any time following the birth of the fetal buttocks or if there is evidence of poor/reducing fetal tone, perfusion, colour or fetal heart in line with the Physiological Breech Birth Algorithm.
- The presence of a skilled birth attendant is essential for safe vaginal breech birth. Having a skilled practitioner in attendance is the only 'intervention' which has been shown to improve outcomes for babies.
- When acting as the lead facilitator of a vaginal breech birth, the terms 'respect the mechanism' and 'restore the mechanism' should be the key guiding principles. 'Hands off the breech' is no longer an accepted practice principle; resolving breech complications requires a prompt, 'hands on' approach.
- The umbilical cord should not be handled.
- Term breech birth is within the remit of a midwives scope of practice. To gain experience, midwives and doctors should be encouraged to act as the lead professional in a vaginal breech birth, which is progressing normally – supervision of the birth must be from a practitioner who is skilled and competent in breech birth, together with the attendance of an obstetric registrar or consultant on-call.
- 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 birth should be considered if there is delay in the descent of the fetal buttocks in the second stage.
- The consultant obstetrician, on-call anaesthetist and neonatal team should be notified when second stage approaching. The neonatal team should be present at the birth, and the Anaesthetist available on Delivery Suite
- The choice of position should be a maternal one, however, the preference of the practitioner should also be considered.
- Documentation should be completed on the provided PROMPT breech birth form in lithotomy (see <u>Appendix 1</u>) and the physiological breech birth form in upright position (see <u>Appendix 7</u>)

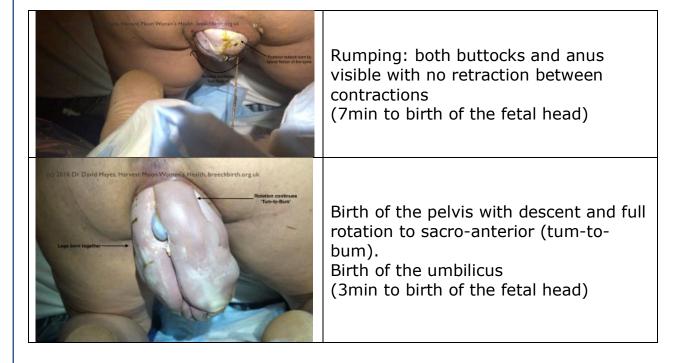
5.3. Position for Vaginal Breech Birth

The woman should adopt the position she is most comfortable in. However, the preference of the practitioner should be considered for safety, especially for management of complications

5.4 Normal mechanisms of vaginal breech birth

The birth of the baby should be left to progress spontaneously as long as there is no evidence of complication or fetal compromise:

- The birth should be completed within 7 minutes from 'rumping' of the buttocks to the birth of the fetal head (a timer should be started to ensure keeping with the timings of the Physiological Breech Birth Algorithm (Reitter et al, 2020)); 5 minutes from birth of the pelvis to birth of the fetal head; 3 minutes from birth of the umbilicus to birth of the fetal head.
- Note: it is recommended a scribe is present in the room to document timings.
- The 24 hour clock time should be documented when the timer is started, all timings thereafter should be recorded by the stop watch (min:sec).
- The breech typically descends with the sacrum transverse, anterior (pubic) buttock leading. On vaginal examination this will feel asynclitic – this is normal for breech. Maternal movements assist this process in the same way it assists cephalic descent.
- Rotation will begin from birth of the buttocks or pelvis and complete so baby is facing 'tum-to-bum' by the time it has been birthed at the nipple line (scapula visible in lithotomy births).
- Legs should be born within <2 secs of each other, if there is a delay, popliteal pressure should be used.
- Arms should also be born within <2 secs of each other



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(0.20) Dr David Hayes, Harve to strongen's Health, breechbirth.org.uk Piesel born	`Full' perineum followed by birth of the fetal head

5.5. Vaginal Breech Birth in an Upright Position

- This is the position of choice when facilitating a breech birth because research has shown it reduces length of second stage and reduces the likelihood for a Caesarean birth and complications associated with breech birth (Louwen et al, 2017).
- This position improves pelvic dimensions (Reitter et al, 2017) for birth, it supports physiology and research has shown there is a 70% chance of a spontaneous birth without the need for intervention (Vlemmix et al, 2013; Louwen et al, 2016; Bogner et al, 2015). If using a forward leaning kneeling position, the practitioner facilitating the birth should be confident and competent in the manoeuvres required to resolve complications in an upright position or have someone supervising who is competent.
- The anterior (pubic) buttock is born first, followed by the baby's anus and the posterior (sacral) buttock by lateral flexion of the fetal spine.
- The sacrum will rotate 'tum-to-bum' (sacrum anterior). If rotation is tending towards sacrum posterior, gentle rotation using the fetal pelvis should be applied to guide the baby in the correct position.
- The baby's legs will be born spontaneously, providing there is descent with each contraction. The legs should be born within 2 seconds of each other, if they do not, then gentle pressure behind the popliteal joint should be applied to the birth of legs.
- After the baby's legs are born there will be a clear view of the umbilicus. Do not touch the cord but observe and document colour, tone, flexion/movement. It is important to keep the room warm as it is important not to touch baby with towels etc.
- Reassuring sign: if you observe a sternal crease/cleavage (valley of the cord) on the baby's chest you know the arms are in front and should be born with the next maternal effort.
- The arms should be born within 2 seconds of each other, if this does not happen you will need to assist with the birth of the pubic (anterior) arm first, followed by the sacral (posterior) arm if this does not deliver.
- The baby should remain in the 'tum-to-bum' (sacro-anterior) position.
- A well flexed head will pass easily through the pelvis. Commonly, women experience an urge to lower their bottoms to the surface on which they are kneeling. This maintains and promotes flexion of the head and should not be interrupted.
- The baby may spontaneously pull their knees up into a fetal position (recoil reflex action). This also promotes flexion and helps the head to be born.
- The normal mechanism is the same regardless of the position of the woman, however, in upright positions there is better vision to be able to identify the normal mechanism and a 70% chance the baby will be born without the need of further intervention (Louwen et al, 2016).

The responsible obstetrician may be more familiar with performing the maneuvers required in a difficult breech birth with the woman in the lithotomy position. If a woman chooses an upright position she should be made aware that if interventions are required during the birth, she will be given assistance to move into a lithotomy position (semi-recumbent position on the bed should be avoided unless the baby has room to 'hang' because if the baby lays on the bed it will deflex the head making it more difficult to resolve the complication and an adverse outcome more likely).

If a clinician with experience of undertaking manoeuvres in an upright position is available, these should be performed without delay. Clear dialogue or roles and responsibilities prior to the birth are mandatory between the midwifery and obstetric leads in attendance.

5.6. Vaginal Breech Birth in a Lithotomy Position

(See <u>Appendix 6</u>)

In semi-recumbent/lithotomy positions it is much more likely manoeuvres will be required to assist the birth of the breech:

- Popliteal pressure should be applied to assist the birth of the legs if:
 - There is no continuous progress
 - There is identification of a complication through lack of rotation to a 'tumto-bum' position.
 - Spontaneous delivery of the legs does not occur within the set time frames.
- Lovset's manoeuvre is used to deliver the arms in a compound arm complication or if no rotation occurs due to a nuchal arm. This involves rotation of the body to facilitate the delivery of the arms. It may require elevation of the fetus back towards the vagina to allow space to rotate the fetus.
- You should perform immediate intervention to resolve the complication and restore the normal mechanism.
- If there is no descent with the next maternal effort help to flex the head especially if the baby's tone and colour are poor. You should wait for the nape of the neck to be visible and use MSV to deliver the fetal head. Both hands are used to promote flexion and delivery of the head. If MSV not successful, forceps should be applied to assist delivery of the fetal head.
- Forceps assisted birth requires an assistant to hold the baby while forceps are applied. Wrigley's forceps are not suitable.

5.7. Fetal Monitoring

In an otherwise uncomplicated pregnancy, there is no evidence CTG monitoring should be routinely used. Intermittent auscultation is suitable.

Practitioners must be aware of the increased likelihood of monitoring maternal pulse during the second stage of labour. If monitoring of the fetal heart is difficult an FSE should be applied to ensure good fetal monitoring.

- Provided there are no other risk factors for continuous monitoring in labour, intelligent/intermittent auscultation is an appropriate form of fetal monitoring for breech presentation, this is particularly useful to support active birth techniques in the first stage of labour.
- If continuous monitoring is being used, consider use of an FSE applied to the fetal buttocks.
- Always consider use of a pulse oximeter to differentiate between maternal and fetal heart rate.

5.8. Facilities

Birth in a hospital with facilities for immediate Caesarean birth should be recommended with planned vaginal breech birth, but birth in an operating theatre is not routinely recommended.

6. Management of term vaginal breech birth

6.1. Breech Birth Manoeuvres

(see <u>Appendix 5</u> for manoeuvres)

- If the breech is advancing well (in line with the Physiological Breech Birth Algorithm (Reitter et al, 2020)) and the normal mechanism for breech birth is observed, respect the mechanism and do not intervene.
- If normal mechanisms are not observed, progress is slow, or there is poor fetal tone and/or colour, then manoeuvres should be used to resolve any complication and restore the mechanism for the breech birth.
- The choice of manoeuvres that may be needed to assist with the birth of the breech will depend on the maternal position and the individual experience / preference of the facilitating practitioner.
- Breech extraction should not be routinely used.
- The facilitating clinician should guide the body to keep the tum-to-bum position if rotation to sacral posterior is noted only, by holding the pelvic girdle, not the abdomen.
- Assistance without traction should be timely if there is evidence of poor fetal condition (lack of tone or colour), or evidence of delay (commonly due to an arm complication or an extended neck).
- As a general principal, there should not be a delay of more than 7 minutes from `rumping' to completion of the birth; 5 minutes from birth of the pelvis to birth of the fetal head; 3 minutes from birth of the umbilicus to completion of the birth. A timer should be started from these points.

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 and/or there is no rotation of the baby from the sacral transverse position, it is likely to be a nuchal arm; this requires a rotational manoeuvre to release the anterior (pubic) 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 (pubic) 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 (sacral) 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/upright 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. forceps (Neville Barnes) in supine/lithotomy positions
- 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 in either upright or supine/lithotomy positions.
- Similarly, with an upright breech birth and an impacted head, you would see a puffed out chest. 'Elevate and rotate' should be used to resolve this complication.
- Shoulder press can be used in the all fours position to help with the birth of the head, buttock lift can be used in addition to make this manoeuvre more effective if necessary.
- 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

- Continuous electronic fetal monitoring (CEFM) should be offered.
- Fetal blood sampling in labour is not advised.
- If any fetal concerns, discuss with consultant obstetrician

7. Management of preterm breech

Incidence and Associations

- At 26-32 weeks gestation approximately 25% of all presentations will be by the breech, giving an overall incidence of about 0.5%.
- Although the majority of preterm breeches arise by chance, there is a higher incidence of congenital abnormality (Karp et al., 1979).
- The preterm breech demonstrates a higher antepartum stillbirth rate, total stillbirth rate and neonatal death rate, with the poor outcome for very low birth weight infants being mainly related to complications of prematurity and not the mode of delivery.

Management

- In all cases the Consultant should be involved in decision making.
- Evidence regarding term breech should not be extrapolated directly to preterm breech birth.
- Routine caesarean birth for spontaneous breech preterm labour is not recommended.
- Mode of birth for preterm pregnancies 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 birth at the threshold of viability (22-25+6 weeks of gestation) is not routinely recommended.

Intrapartum Management

- Accurate diagnosis of preterm labour: progressive dilatation and effacement of the cervix in the presence of painful uterine contractions. Full aseptic technique should be used for vaginal examinations in the presence of ruptured membranes to avoid ascending infection.
- **Ultrasound scan**: to confirm the fetal presentation and placental localisation. Ideally an estimate of fetal weight and exclusion of fetal abnormality should be performed at the same time if this is possible.
- The decision about mode of delivery should be made after consultation with the labouring woman and her partner.
- Tocolysis, is appropriate for the administration of corticosteroids or if transfer to another centre is being considered.

Spontaneous Onset of Labour

- Routine Caesarean birth for breech presentation in spontaneous preterm labour is not recommended. The mode of delivery should be individualised based on the stage of labour, type of breech presentation, fetal wellbeing and availability of an operator skilled in vaginal breech delivery.
- Caesarean birth for breech presentation in spontaneous preterm labour at the threshold of viability (22–25+6 weeks of gestation) is not routinely recommended.
- Labour with a singleton preterm breech should be managed as with a term breech (see above).
- Epidural anaesthesia is preferable. This may prevent bearing down prior to full cervical dilation and also avoids delivery of the trunk through an incompletely dilated cervix.
- There is some evidence that delivery with intact membranes is an advantage (Goldenberg and Nelson, 1984).
- There is no evidence that obstetric forceps for the after coming head confers any advantage.

Difficulties at Birth

- The preterm breech fetus faces considerable problems whatever the route of delivery:
- Bruising due to difficult delivery.
- Delivery of the trunk through an incompletely dilated cervix (in up to 14% of deliveries), resulting in entrapment of the after coming head with consequent hypoxic and mechanical stress.
- Where there is head entrapment (14% of preterm vaginal breech deliveries), incisions in the cervix (4 and 8 o'clock) (vaginal birth) or vertical uterine incision extension (Caesarean birth) may be used, with or without tocolysis.
- Prolapse of the umbilical cord, which is commonest in a footling breech presentation with consequent hypoxic stress.

Although these are more common during vaginal breech deliveries, they may be encountered during abdominal delivery as well, with considerably extra morbidity and mortality on the woman with abdominal delivery.

8. Management of twin breech

- Women should be informed that the evidence is limited, but that planned caesarean birth for a twin pregnancy where the presenting twin is breech is recommended.
- Routine caesarean birth 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 birth.
- Routine emergency caesarean birth 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 and availability of appropriate clinical expertise. Use the risk assessment in <u>Appendix 4</u> to assess recommendation for mode of birth with undiagnosed breech presentation.
- Women presenting in advanced labour with undiagnosed breech presentation should be counselled regarding the risks and benefits of vaginal breech birth and emergency Caesarean birth (in advanced labour e.g. late first stage or second stage of labour) to enable them to make an informed choice (Appendix 4).
- Women near or in second stage of labour should not be routinely offered caesarean birth.

10. Following the Birth

- Delayed cord clamping should be promoted. It is very likely there has been a cord occlusion during the birth of the breech baby and therefore enabling time for the oxygenated blood to flow back to the baby may assist with the transition to extrauterine life.
- If there are any injuries to woman or baby, an incident reporting form should be completed.

11. Documentation

The PROMPT *Vaginal Breech Birth Documentation Form* (see <u>Appendix 1</u>) for vaginal breech birth in Lithotomy / Supine position, and the *Physiological Breech Birth Form* (<u>Appendix 7</u>) for breech birth in physiological / upright position should be used for documentation with use of a scribe.

12. References

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- 19. <u>https://www.rcog.org.uk/en/patients/patient-leaflets/breech-baby-at-the-end-of-pregnancy/</u>
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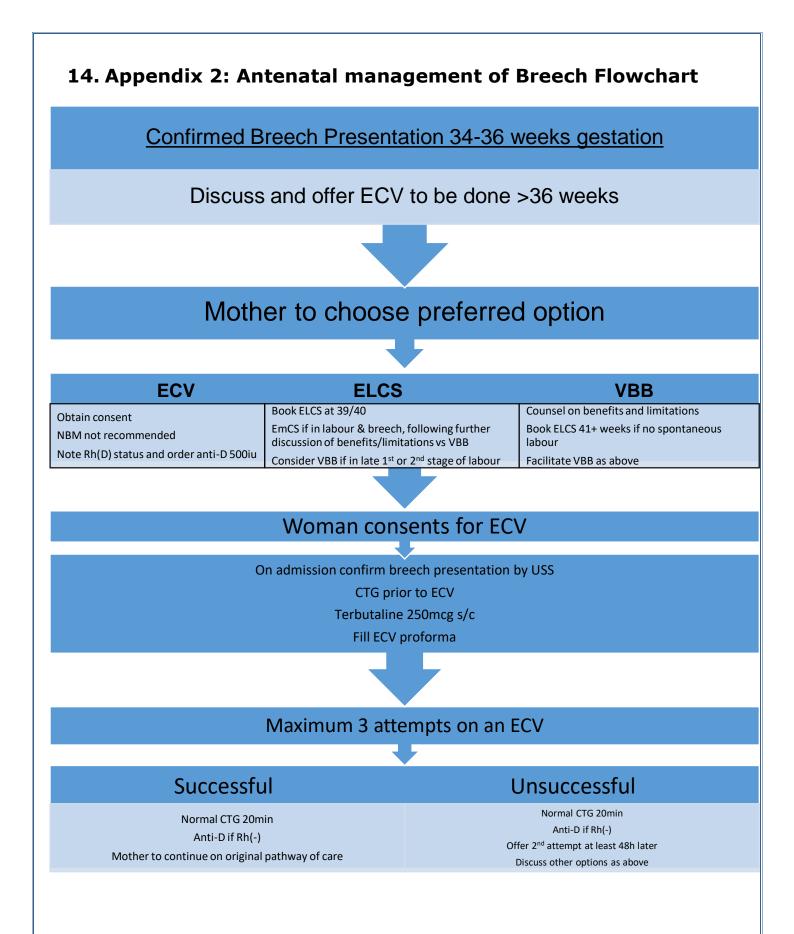
13. Appendix 1: Vaginal Breech Birth Documentation Form (DOUBLE CLICK THE DOCUMENT TO OPEN IN ACROBAT READER AND PRINT)

< x~	~
La.	SCYMBU (WALES
	SPROMPT
1	 Provide the the two processing (- which is the field of the two processing)
3	

VAGINAL			NTATIO						
VAGINAL BREECH BIRTH DOCUMENTATION					Mother's Name				
DateTime				Date of Birth					
Person completing form				Hospital Number					
Designation					HOSPITAL IN	umber			
Signature					Consultant	t			
Time of con	femation of	breech prese			Dispaced ward	nal breach	Unal		upging! broach
Time of con	nrmation of	preech prese	entation:		Planned vagi (please circle)		Unpi	anneo	vaginal breech
VE Findings	at diagnosis				Time called f	or assistance:			
Time of con	firmation of	full dilatatio	n:		Time bladder	emptied:		Volun	ne:
Maternity t	eam present	at birth:			Additional st	aff attending:			
	NAME		R	OLE		NAME			ROLE
Maternal position for birth:	Semi- recumbent	Lithotomy	Side- lying	All fours	Kneeling	Other			
(please circle)	<u> </u>								
Time baby's	s buttocks vis	ible:			Fetal heart rate: CTG / Doppler CTG: Normal Suspicious Pathological (please circle)				
Time active	pushing con	menced:			Episiotomy (if required):				
Time baby's	s buttocks bo	rn:			Fetal heart R	ate:		CTG /	/ Doppler
					CTG: Norma	l Suspicious	Patholo	gical	(please circle)
Time baby's	s legs release	d:			Pressure applied to popliteal fossae to assist release of				
Time baby's	s umbilicus fi	rst visualised	:		baby's legs: Yes / No				
Position of		Sacro-	S	acro-		tation of baby			
breech:		Anterior	Po	sterior		of pelvis) to sa			
Time baby's	s arms releas	ed:			Lovsett's manoeuvre to release baby's arms: Yes / No				
Time nape o	of the neck v	isualised:			Head advance	ing: Yes / No			
Mode of bir	th of baby's	head (please cir	rcie):						
Spontaneou	15	Maurio	æau-Sme	llie-Veit ma	anoeuvre	Assisted with	h		forceps
Time of birt	h of baby:				Suprapubic p	ressure applie	d: Yes /	No	(please circle)
Neonatolog	ist present:	Yes / No	(please	e circle)	Neonatologis	st name:			
Time arrived									
APGAR scor	es	1 min:	_		5 mins:		10 min	s	
Cord gases:	Art p	H:	Art BE:		Venous pH:		Venou	s BE:	
Baby admit		tal Intensive	Care Uni	it:	Parents/staff debriefed: Yes / No (please drde)				aze drde)
Terre	Yes / N				Datix Inciden	t Form comple	eted: Yes	i / No	(please circle)
Time				Datix Incident Form No:					



July 2019



15. Appendix	3: ECV form	p.1					
GIG CYMRU NHS WALES	Bwrdd Iechyd Pr Cwm Taf Morga University Health	nnwg	d c	Patient name: Hospital number: DOB: Address:			
	Ē	ECV B	ooking Form				
Booking Date:		Date	of ECV:				
Booked by:		Book	oking taken by:				
EDD:	Parity: G	Ρ	Gestational	age at ECV:			
Previous c-births:	number	Rh	□ Positive	□ Negative			
AFI: 🗆 Normal 🗆	l Oligohydramnios	🗆 Pol	yhydramnios				
BMI: EC\	/ Leaflet given 🛛						
Any contraindications?							
Abso	olute			Relative			
Where caesarean is inc	dicated even if		Significant th	ird trimester haemorrhage in			
presentation is cephali	с		previous pre	gnancy.			
Placental abruption			Evidence of '	placental dysfunction' (e.g.			
□ Severe pre-eclampsia			-	nall for gestational age or			
Abnormal fetal Dopple	r		oligohydram				
Abnormal CTG		Serious fetal anomaly.					

- 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
 induction).
 Previous uterine surgery (data on safety after one caesarean birth is reassuring but limited).
 Women on treatment doses of Clexane should have their ECV performed in discussion with the
- Where the mother declines or is unable to give informed consent

Turn over for procedure

□ Oligohydramnios.

level of anticoagulation.

□ Unstable lie (unless as part of a stabilising

operator at a time interval closest to the trough

16. Appendix 3: ECV form p.2

ECV Procedure

Dperator: CTG:	
Ultrasound scan Fetal heart seen AFI	Disconto
Fetal Lie Presentation Position	Placenta
Longitudinal Breech Left Trank	Anterior
□ Transverse ○Frank □ Right	Posterior
□ Oblique ○Complete □ Anterior	Fundal
◦Footling □ Posterior	
Cephalic	Praevia
Patient's Consent: Verbal Written (Consent Form 3)	
Toclolysis: Terbutaline 250 mcg s/c STAT (rule out APH, hypote	ension or heart disea
Dutcome: 🛛 Successful 🖓 Unsuccessful	
Post-procedure CTG: Normal Suspicious Pathological	
Plan:	
Rh Anti D (if applicable)	
□ Follow Up □ ANC □MW When:	
Repeat ECV attempt in 1 week (if unsuccessful)	
Planned vaginal breech	
□ ELCS Date:	
Additional remarks:	
Operator's Name: Signature:	
Operator's Name: Signature:	

17. Appendix 4: Risk assessment for Undiagnosed Breech

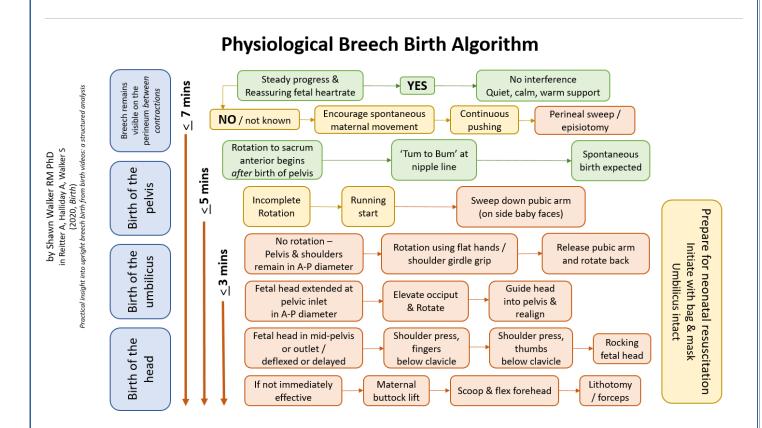
UNPLANNED / UNDIAGNOSED BREECH DECISION TOOL

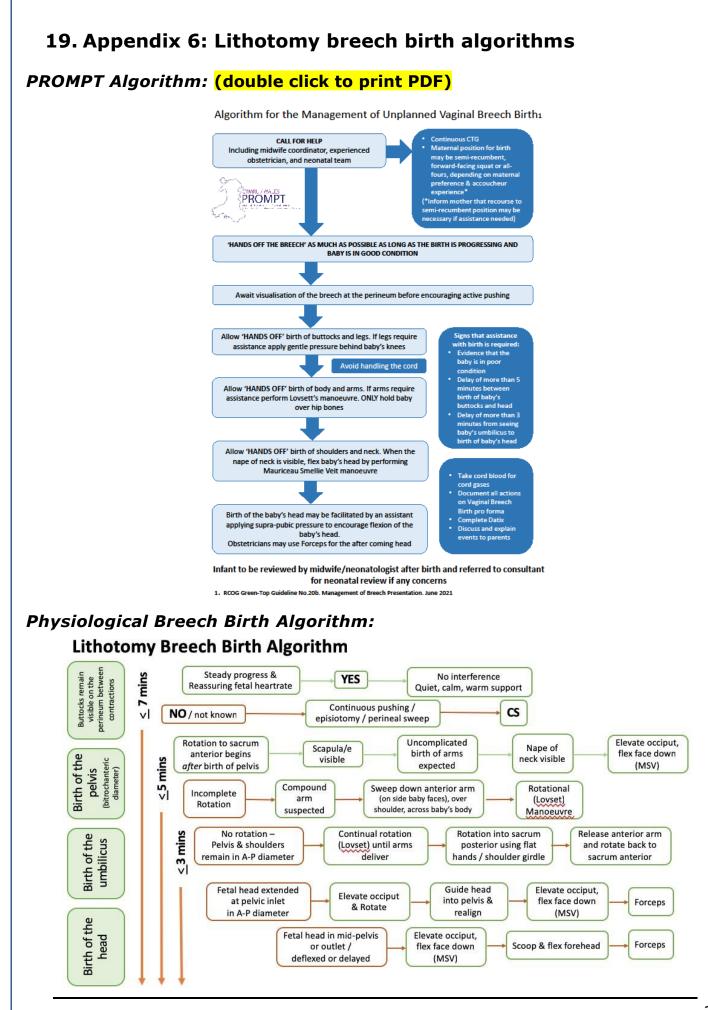
Diagnosis of breech presentation:	□Antenatally □Active labour □Early labour □Advanced labour (> 9cm)				
Parents have been informed that there is no evidence to indicate a Caesarean birth in labour improves outcomes for breech presenting babies diagnosed in labour	□Yes □No				
Parents have been informed of the increased risks associated with Caesarean births performed in labour, particularly in advanced labour	□Yes □No				
Parents have been informed of the current RCOG (2017) guidelines recommendations of vaginal breech birth in active/advanced labour	□Yes □No				

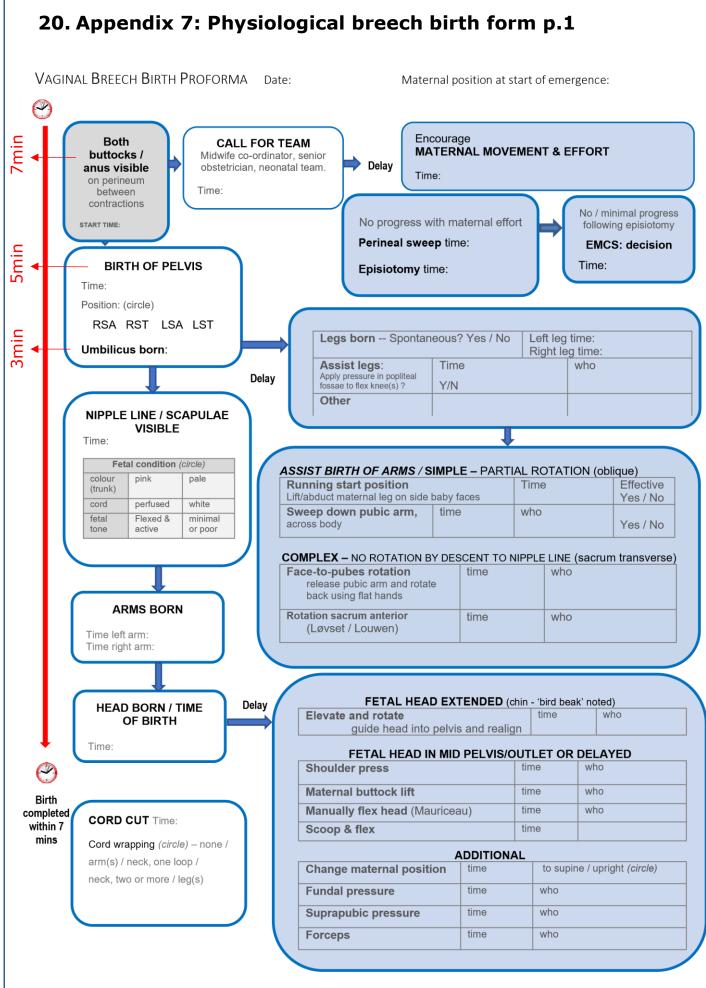
EVALUATING RISK FOR BABY	Minimal Risk 0	Moderate Risk 1	High Risk 2	Score
Type of breech	□Frank/extended □Complete/flexed		□Footling/standing □other	
EFW	□2500g - 3800g	□>3800g □<2500g □Unknown	□<2000g	
Fetal Head	□Flexed	□Deflexed □Unknown	□Extended	
Birth History	Multip or primip with clinically adequate pelvis	Primip with suspected contracted pelvis	Previous LSCS	
Complicating factors	Low risk midwifery led care	Medical complexities NOT affecting the fetus	Medical complexities affecting the fetus	
Availability of skilled / experienced staff	Skilled and experienced	Clinically trained but not experienced	None available	
Fetal condition (CTG)	Normal	Compensated hypoxic stress without rise in the baseline rate	Rise in the baseline rate +/- meconium	
Progress in labour	Fast >6cm	Normal 3-6cm	Delayed	
			TOTAL score	

If score >2 recommendation for Caesarean birth









21. Appendix 7: Physiological breech birth form p.2

Planned Vagina (circle)	I breech	Yes /	No	Risk Assessment	orm	completed		Yes / No		
Cord Gases Tal	ken	Yes /	No	Reason if not done)					
Cord Gas Resu	lto.			Arterial:		<u></u>		Venous:		
Cord Gas Resul	its			Base Excess:				Base Excess:		
Explanation to		Yes / No	Ву			Baby assess (may be done		after birth by: idwife)		
Baby admitted to	NICU	Yes / No	If yes	yes, for review & follow up by consultant neonatologist						
Transfer times/details										
Ambulance / labour ward called	time			of arrival of Ilance	time	•		e of transfer to hospit our ward	pital / time	
Time of handover	time		Decis theat	sion to transfer to re	time	3	Tim	e transferred to theatr	e	time
Staff present at	birth									
Name	Dirti		Ro	le			Time	called	Time a	arrived
			_							
Additional Note	es & Infori	mation								
Scribed By				Signature						
Designation.										
Reflective Revie	ew by:			Date:		Staff included:				
Notes:										
L										
										29

22. Appendix 8: Breech choices counselling form p.1

Breech Choices Counselling

Parity:			EDD:		Name:		
Previou	us Births: NVD	EmCS	ELCS	SB	Hospital no.		
Existing Pregnancy Conditions: DOB:							
					Address:		
Topics to be discussed (tick the boxes as necessary)							
ECV							
□ Simple technique for turning the baby head-down in the uterus (Success 50%)							
□ Risks: <1% (SROM / bleeding from placental site / fetal heart changes leading to CS)							
	Use of tocolytics						
Planned caesarean birth							
_	 Leads to a small reduction in the perinatal mortality compared with planned VBB Any decision to perform a CS needs to be balanced against the potential adverse 						
	• •			balanced agail	nst the potential adverse		
	consequences that may result from this						
	□ The reduced risk is due to 3 factors:						
	The avoidance of stillbirth after 39 weeks The avoidance of Intranartum risks						
	The avoidance of Intrapartum risks The risks of vaginal broach birth						
 The risks of vaginal breech birth (Only the last one is unique to a breech baby, the first 2 apply to cephalic babies too) 							
Const the last one is unique to a breech baby, the first 2 apply to cephalic bables too) Risks of head and arm entrapment explained, including what we may need to do to resolve							
	these						
	More information	available fro	om the NICE	Guidance on	Caesarean Birth		
	https://www.nice.						
Mortality							
	approximately 1/1	000 with pla	anned cepha	lic birth			
Outcomes							
					nd serious short-term complications		
	Has not been shown to increase the chance of long-term morbidity (Whyte et al)						
					rodevelopmental delay CS 14 / VBB 13)		
					n carries a small increase in		
	•				lanned vaginal birth:		
	Infection / thromb						
				•	n future pregnancy, including the e increased chance of complications		
	at an ERCS and the			-	•		
					se in the chance of stillbirth for		
subsequent babies although this may not be causal Individualised assessment (based on individual risk profile and reproductive intentions)							
<u> </u>							

22. Appendix 8: Breech choices counselling form p.2

	affecting safety of planned vaginal breech birth:				
	Hyperextended neck on ultrasound				
	High EFW more than 3.8kg				
	Low EFW less than 10th centile				
	Footling (standing) presentation (discuss all presentations/cord events)				
Additional discussion points					
	Continuous monitoring may lead to improved neonatal outcomes				
	Skilled and experienced attendant improves safety				
	When in labour, the breech team (where available) or triage/labour ward should be notified				
	Explained the breech team system (where available). Understands we cannot offer a 100%				
	guarantee but where possible, someone with recent experience and skill in physiological				
	breech birth will do their best to attend				
	Signs of labour reviewed				
	If no experienced team member is available, she may be offered a CS by the on-call team				
	upon admission in labour				
	Choice of pain relief discussed				
	Maternal positioning for labour and birth discussed				
	6/52 post birth scan of baby's hips might be required				
Planned mode of birth					
	ELCS				
	VBB				
Counselling date:					
With W	'hom: Signature:				
Comme	ents:				

Guidance given to the woman based on: <u>RCOG 2017 Breech Guideline, directed to complete guideline on-line</u>

Information for Women leaflet provided:

(https://www.rcog.org.uk/en/guidelines-research-services/guidelines/gtg20b/)

Information given about OptiBreech Study (https://optibreech.uk/)

Postural exercises / complementary therapies like moxibustion, acupuncture, swimming, reflexology, breech tilt positions and spinning babies discussed, more information here: <u>https://www.chelwest.nhs.uk/services/maternity/pregnancy-birth/your-pregnancy/a-breech-baby</u>