Breech presentation

Target audience	Maternity staff
Patient group	Patients with confirmed breech presentation

Summary

This guideline has combined the following four documents which have now been archived:

- Management of breech presentation in pregnancy and external cephalic version
- Caesarean birth for breech presentation
- Elective Caesarean section for breech presentation
- Intrapartum management for vaginal breech delivery (in women who deline or are unsuitable for Caearean section) & management of complications of vaginal breech delivery

The incidence of singleton breech presentation is 25% at 28 weeks, 16% at 32 weeks and 3-4% at term. This affects almost 40,000 women annually in the UK alone.

The authors of the term breech trial recommended "the best method of delivering a complete or frank breech singleton **at term** is by planned lower segment caesarean section" based on a 75% reduction in perinatal mortality in the planned CS group. 2 year follow up data did not demonstrate any significant differences in neurodevelopment between the 2 groups.

Overall therefore, options for management include external cephalic version (ECV), elective caesarean section (ELCS) and vaginal breech delivery (VBD). However, there has been an increasing reluctance, in light of recent research, to allow vaginal birth and for many, elective caesarean birth is the preferred option. However, some women with a breech presentation at term will make an informed choice to have a trial of vaginal breech delivery. This is best supported when the baby and mother are of normal proportions, the breech presentation is frank (hips flexed, knees extended) or complete (hips and knees flexed, feet not below the fetal buttocks) and the head is not hyperextended, the delivery is carefully planned and a skilled obstetrician is on site.

There is no good evidence to support that caesarean birth is the safest mode of delivery for the preterm breech with no other risk factors. Caesarean birth for breech presentation at 22+0 - 25+6 weeks of gestation) is not routinely recommended.

There are also women who will present in advanced labour with an undiagnosed breech presentation, for which caesarean section may not be an option. It also applies to the delivery of the second twin in breech presentation. Management of complications of vaginal breech delivery is also included in this guidance. It is therefore important that clinicians are familiar with techniques for achieving successful VBD.

The consultant on-call should be notified immediately and a decision made regarding the mode of delivery. The mode of delivery should be individualised based on the gestation, stage of labour, type of breech presentation, station of the breech in the pelvis, fetal wellbeing, the experience of those attending the birth, availability of an operator skilled in vaginal breech delivery and wishes of the

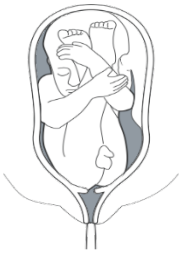
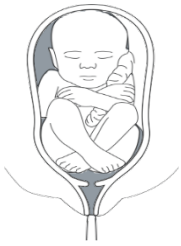
labouring woman herself. The RCOG Green Top guideline has stated that selection of appropriate pregnancies and skilled intrapartum care may allow planned vaginal breech birth to be nearly as safe as planned vaginal cephalic birth. It does not follow from this that vaginal delivery is more hazardous than **emergency** caesarean section, particularly when labour is advanced. Ten percent of women in the Term Breech Trial who were randomised to caesarean section delivered vaginally before their section could be carried out.

If a woman chooses not to have a caesarean section or labour is too advanced for caesarean to be undertaken safely, the options are vaginal breech birth or assisted vaginal breech delivery. The former method relies solely on maternal effort, preferably in an all fours position and the latter on minimal intervention and assistance to facilitate a vaginal breech delivery. The decision as to the most appropriate method would be made at the time depending on factors such as the presence or otherwise of an epidural and the experience of practitioners available on labour ward at the time.

This guideline will detail the different type of breech presentation, and will then detail the different management options.

Contents

Types of breech presentation

Frank/extended	This is the commonest type of breech presentation and occurs most frequently in the primigravid woman towards term: the fetal thighs are flexed, but the legs are extended at the knees and lie alongside the trunk, the feet being near the fetal head.	
Complete/flexed	The flexed breech occurs more commonly in the multigravid woman. Flexed breech is when the fetus sits with the thighs and knees flexed with the feet close to the buttocks.	
Footling	This type of breech is more likely to occur when the fetus is preterm, but is relatively rare. Footling breech is when one or both feet present below the fetal buttocks, with hips and knees extended. There is increased risk of cord prolapse.	
Knee	This is the least common. This occurs when one or both knees present below the fetal buttocks, with one or both hips extended and the knees flexed.	

Management of breech presentation

If breech on palpation or on scan at less than 34 weeks of gestation, advise the woman there is still a high chance the baby will turn to cephalic presentation. If breech at or greater than 34 weeks of gestation, and elective caesarean birth is not planned for another obstetric indication, arrange consultant appointment at 35-36 weeks of gestation if nulliparous and 36-37 weeks of gestation if multiparous. In the event that presentation is uncertain or breech presentation is suspected on abdominal palpation at 36 weeks of gestation or more, provide a patient information leaflet and telephone referral should be made to the daycare unit at University Hospital Wishaw (UHW) for a presentation scan. Women should be reviewed for presentation scan within 72 hours of referral.

Daycare scans will be to assess fetal presentation ONLY and referral should only be made to the scan department if there is an additional concern such as abnormal measurement of symphyseal fundal height (SFH).

Core midwifery staff in the daycare unit will perform presentation scans independently following a period of supervised scan practice with their sonographer mentor and completion of their competency workbook. Ongoing competency will be maintained by performing presentation scans at least once a month and assessed annually by a designated sonographer. In the event that no midwife with competency is available within the following 72 hours, an appointment should be made in the daycare unit and the on-call obstetric consultant should attend to confirm presentation.

If diagnosed with breech presentation after 36 weeks of gestation, women should be counselled on their birth options (see appendix 1). Generally, there are three options:

- External cephalic version
- Elective caesarean birth
- Vaginal breech delivery

However, a planned vaginal birth remains rare and attempts to prevent breech presentation at term remain important. ECV should be offered as first-line management at the gestations described below. If the woman declines ECV, ELCS should be offered at 39 weeks of gestation. If the woman's preference is for a vaginal breech birth, this must be fully discussed and a clear plan documented in her electronic record.

External cephalic version (ECV)

ECV is the manipulation of the fetus, through the maternal abdomen, to a cephalic presentation. The success rate of ECV is approximately 50%. Overall success levels are greater for multiparous women (60%) than for nulliparous women (40%).

Labour after successful ECV is associated with a slightly increased rate of caesarean and instrumental birth when compared with spontaneous cephalic presentation. The risk of caesarean birth may be greater with a shorter ECV-to-labour interval. The use of tocolysis improves the success rates of ECV.

ECV should be offered:

- from 36+0 weeks of gestation in nulliparous patients
- from 37+0 weeks of gestation in multiparous patients

There is no upper gestation limit for when ECV can be offered, but contraindications may be more common.

With an unstable lie, ECV is reasonable **only** in the course of a stabilising induction. ECV should only be performed if there is a valid indication for induction. Potential risks in this scenario include cord prolapse, transverse lie in labour and fetal heart rate abnormalities.

After an unsuccessful ECV attempt at 36+0 weeks of gestation or later, only a few babies presenting by the breech will spontaneously turn to cephalic presentation. Few babies revert to breech after successful ECV.

ECV performed pre term is not associated with a reduction in non-cephalic births.

Women should be informed that ECV after one caesarean delivery appears to have no greater risk than with an unscarred uterus. The entire clinical presentation in this situation should be assessed to advise on ECV in this scenario.

Women should be counselled that with appropriate precautions, ECV has a very low complication rate. The reported risk of emergency caesarean section within 24 hours is approximately 1:200 (0.5%) with the indication in over 90% being vaginal bleeding or an abnormal CTG following the procedure.

The uptake of ECV is best increased by timely identification of the baby presenting by the breech and provision of evidence-based information ideally from the woman's known care provider. The greatest impediment to the use of ECV is the nonidentification of breech presentation. The proportion of undetected breech presentation at term has been reported in as high as 20.0–32.5% of all breech presentations and these have worse outcomes. The possibility of breech presentation should always be considered at clinical examination although abdominal palpation has a sensitivity of only 70%.

Particular care should be taken with high-risk groups in the third trimester e.g. where a previous baby has been breech. Recurrence rate after one breech presentation is 9.9%. Access to a presentation scan after 36+0 weeks of gestation is helpful.

Potential risks of ECV:

- Placental separation - concerns stem largely from observations and anecdotal accounts of procedures carried out pre-term or without fetal monitoring.
- Direct fetal trauma - fetal deaths at term have been associated with the use of nitrous oxide or general anaesthetic.
- Fetomaternal transfusion – a detectable feto-maternal transfusion is reported in 0-28% of cases. Therefore, rhesus negative women should be given anti-D.
- Changes in fetal heart rate – these are common and usually transient with no association between these changes and various outcome measures.
- Spontaneous rupture of membranes (SRM) +/- cord prolapse.

Contraindications to ECV:

Absolute:

- Any associated condition which requires a Caesarean section
- Major Placenta praevia
- Uterine anomaly
- Significant antepartum haemorrhage (current or within 1 week)
- Multiple pregnancy (except after delivery of a first twin)
- Evidence of fetal compromise e.g. abnormal Dopplers or CTG

Relative:

- Rhesus isoimmunisation
- Minor antepartum haemorrhage

- Ruptured membranes
- Oligohydramnios
- Intrauterine growth restriction
- Pre-eclampsia

Procedure for ECV:

The process can be quick in parous patients and take more time in primigravida. Rotation can be effected in stages. The procedure should take no more than 10 minutes from commencement of rotation.

- Perform abdominal palpation
- If still palpates as breech, commence CTG and offer analgesia – cocodamol 30/500 x 2 tabs (alternative if allergic) 30 mins prior to planned procedure.
- Perform bedside ultrasound scan to determine type of breech and position of fetal back, liquor volume and placental position.
- Administer terbutaline 0.5 milligrams subcutaneously unless contraindicated.
- Hand placed to lift breech out of maternal pelvis and other hand used to flex fetal head.
- Attempt rotation – forward roll initial and backward roll if fails.
- Check fetal heart with ultrasound every few minutes to ensure no fetal compromise.
- Post-procedure CTG should be performed, irrespective of whether or not the procedure was successful.
- Prophylactic anti-D should be administered in all rhesus negative women irrespective of whether or not the procedure was successful.
- If ECV successful, arrange follow-up appointment at antenatal clinic the following week to ensure that baby remains cephalic.
- If ECV is unsuccessful or she declines ECV, discuss the risks and benefits of elective caesarean birth versus vaginal breech delivery.

Caesarean birth

A small number of women will go into labour before the date of their elective caesarean section. This may result in a vaginal breech delivery if things progress quickly, but if time allows a caesarean section will be carried out as planned.

However, it is important that women are clinically assessed on admission to prevent unnecessary procedures. This is important as any intervention has major consequences for women, their babies and the maternity services.

ELCS should be carried out from 39+0 weeks of gestation.

All women who are to have elective procedure for breech presentation should be informed at the antenatal clinic or in daycare that they would be clinically assessed on admission, usually by portable ultrasound scan. If the presentation is then cephalic they should be offered the option to await spontaneous labour.

If presentation is cephalic and engaged, the woman generally should be discharged home and given a date to attend the antenatal clinic. The woman must be given unbiased, but correct information and included in this decision.

If the fetal presentation is cephalic but not engaged – there is a possibility of unstable lie. Whilst it is in a favourable position, she may be considered for induction procedure to avoid malpresentation re-occurring. The woman must be given unbiased, but correct information and included in this decision.

Consent

- A procedure-specific consent form should be used.
- ELCS leads to a small reduction in perinatal mortality compared with planned VBD. This is due to 3 factors:
  1. Avoidance of stillbirth after 39 weeks of gestation
  2. Avoidance of intrapartum risks
  3. Risks of vaginal breech birth
- Perinatal mortality is approximately 0.5/1000 with ELCS after 39+0 weeks of gestation and approximately 2/1000 with planned vaginal birth. This compares to approximately 1/1000 with planned cephalic birth.
- ELCS increases the risk of low apgar scores and serious short-term complications, but has not been shown to increase the risk of long-term morbidity.

- ELCS at term carries a small increase in immediate complications for the mother compared with planned vaginal birth.

Delivery steps

The following minimise the operative risk during caesarean section and/ or manages the problem.

1. **Preoperative ward round**
   Introduce yourself to the woman. Read the notes carefully and gain maximum information about type of breech, placental site, parity, gestation, any previous abdominal surgeries etc. Check latest ultrasound - remember that the baby may be big as well as breech. Confirm presentation with portable ultrasound.

2. **Ultrasound**
   Confirm presentation with portable ultrasound and establish where the fetal back lies.
3. **Surgical brief**
   Ensure that anaesthetic, midwifery, theatre and obstetric teams are present. Contact the neonatal team to be present at delivery if neonatal problems are anticipated.
4. **Make an appropriate skin incision**
   Err on a larger incision than you might make for a cephalic presentation. The shape of the head may be unusual (doliocephalic, brachycephalic). Remember that there is no point in making a large skin incision and then a narrower sheath incision. Make as much room as you can. Lateral incision of the parietal peritoneum may help.
5. **Fundal stabilisation**
   Once entered into uterine cavity and breech is being delivered, guide your assistant for fundal stabilisation. This encourages neck flexion and reduces the chance of head extension.
6. **Deliver fetus**
   Once the body is delivered, deliver the after-coming head in the manner described for vaginal delivery i.e. MSV (Mariceua-Smellie-Veit) manoeuvre to aid flexion of neck or forceps application

If there is entrapment of the head:

- Do NOT simply pull harder- Identify where the entrapment is.
- Consider Wrigley's Forceps for the after-coming head if there is enough room and deliver as per instructions for vaginal breech.
- Skin – carefully extend the skin incision with scalpel.
- Sheath – extend the rectus sheath with scissors
- Uterus – extend the uterine incision digitally or with scissors, (J-shaped)
- Consider tocolysis with 0.5mg erbutaline or GTN (spray of two puffs equivalent to 400 mcg per puff as first line).
- General Anaesthesia with a high end tidal concentration of volatile agent eg sevoflurane will often produce useful relaxation of the cervix. Note that GTN increases the risk of PPH.
- Retry applying the forceps
- If the above is unsuccessful, consider inverted -T shaped incision or J-shaped incision

In case of difficulty in delivering the second twin or a singleton in transverse or oblique presentation, try IPV (internal podalic version):

- One hand is used to stabilise the uterus externally, and the other hand and forearm is introduced into uterus.
- A fetal foot/feet are identified by recognising a heel
- The foot is grasped and pulled gently and continuously through uterine incision at.
- The membranes are ruptured as late as possible.
- The baby is then delivered by breech extraction with pelvi-femoral traction
- Lovset's manoeuvre to the shoulders if required and a controlled delivery of the head.
- If arm is extracted by mistake, it should be gently replaced and foot should be identified again.
- This procedure is easiest when the transverse lie is with the back superior or posterior. If the back is inferior or if the limbs are not immediately palpable, follow the curve of the back and down and round to find the leg. Confirm you have a foot before applying

traction. This will minimise the risk of the unwelcome experience of bringing down a fetal hand and arm in the mistaken belief that it is a foot.

- A few seconds of calm consideration and accurate assessment will almost certainly result in an effective delivery manoeuvres.

7. **Haemostasis**
   After delivery, ensure appropriate haemostasis, especially if J-shaped invision or inverted T incisions or if tocolysis was required to aid the delivery**.**
8. **Take paired cord pH samples**.
9. **Document** carefully with timings of skin incision, entry to uterus, delivery of breech and delivery of head. The neonatal condition at birth should be documented.
10. **Surgical sign out**
11. **Surgical debrief - if required**
12. **Patient debrief –** explain to couple what happened. This is of particular importance if a uterotomy is extended and VBAC no longer a future option.

Vaginal breech delivery

See appendix 2.

Complications of vaginal breech delivery

- Intrapartum death
- Intracranial haemorrhage
- Brachial plexus injury
- Rupture of the liver, kidney or spleen
- Dislocation of the neck, shoulder or hip
- Fractured clavicle, humerus or femur
- Cord prolapse

First stage of labour

On admission:

1. **Confirm breech presentation**
   This can be done by abdominal plpation, portable ultrasound or vainal examination. Clinically assess fetal size and adequacy of pelvis.

   Ultrasound is useful to:
   - Assess the type of breech
   - Locate the placenta
   - Assess size of the fetus (unless growth performed within last 14 days)
   - Determine the attitude of the fetal head.
   - Assess Amniotic fluid volume
   - Assess whether the neck is extended or not (**N.B** There should be **no** hyperextension of the fetal head. If present, explain to woman what this means. This is a contra-indication to attempting vaginal birth).
2. **Discuss management options**
   - Confirm the women still wishes a VBD
   - Obtain written consent including options of emergency interventions (Breech extraction and CS) if planned vaginal breech delivery
3. **Summon help**
   Inform the consultant obstetrician, maternity coordinator, theatre staff, neonataoloy and the anaesthetic team.
4. **Obtain IV access**: large bore cannula (16 or 14 gauge) and request group and save.
5. Consider pudendal block and/or perineal infiltration at delivery.
6. Consider epidural (can be helpful but increases risk of intervention.
7. **Membranes:**
   - should be left intact as long as possible due to increased risk of cord prolapse with breech presentation.

- if membranes rupture spontaneously, vaginal examination is required to exclude umbilical cord prolapse.
- if membranes are still intact then amniotomy should only be performed for usual indications.

8. **Continuous electronic fetal monitoring** should be used with an electrode fixed to the fetal buttock if a good abdominal trace cannot be maintained. Fetal blood sampling is not recommended.

Induction of labour is not usually recommended. Augmentation of slow progress with oxytocin should only be considered if the contraction frequency is low in the presence of epidural analgesia and needs to be discussed with the consultant on-call.

Second stage of labour

See appendix 3. Ideally a consultant obstetrician with experience of VBD should be present for the management of the second stage if time allows.

Basic principles:

- Enquire about and document maternal position (supine, lithotomy, upright, all-fours etc)
- Ensure good maternal effort
- Do not touch the cord
- Keep the sacrum anterior
- Empty bladder
- Adequate descent of the breech in the passive second stage is a prerequisite
- Begin active pushing when breech has descended to the pelvic floor and it is visible at the perineum
- Delay lithotomy position until anus is visible over the fourchette (unless breech advancing with good maternal effort on all fours or upright position and only if you are comfortable carrying out any manoeuvres in this position).
- Evaluate for episiotomy – when perineum distended by baby's buttocks
- Allow spontaneous birth of the buttocks (HANDS OFF)
- Allow spontaneous birth of legs (HANDS OFF) but if not progressing, and legs extended assist release of legs by applying gentle pressure into the popliteal fossae to flex the legs at the knee joint.
- Allow the buttocks to spontaneously rotate or gently assist rotation to sacroanterior – HANDLE THE BABY MINIMALLY AND ONLY OVER BONY PROMINENCES OF ILIAC CRESTS TO RECUCE RISK OF TISSUE DAMAGE

Positioning of back:

The baby may be gently grasped by the operator to aid anterior placement of the spine by placing their fingers on the bony fetal pelvis and their thumbs on its sacroiliac region. Avoid holding the baby by the abdomen as this could cause injury to intra-abdominal organs like liver and spleen. Also avoid any downward traction as this could encourage extension of the head and nuchal placement of the upper arms both of which are unfavourable to vaginal breech delivery.

Unnecessary handling or pulling of umbilical cord should be avoided so as to prevent spasm of umbilical vessels.

Allow spontaneous birth of the body (hands off) until lower scapulae visible. The fetal body should deliver with maternal effort. Pulling on the infants trunk can startle the baby to raise its arms and therefore should be avoided.

Birth of arms:

- If winging of the scapula is seen, the baby may have become startled with arms extended, or if nuchal arms is diagnosed, the arms may require assistance
- Gently hold baby over bony prominence of pelvic bones (not abdomen)
- Keep sacrum / spine anterior to turn the fetal trunk towards the symphysis pubis, rotate clockwise to the oblique and sweep one fetal arm down (Lovset's manoeuvre), then rotate trunk in the opposite direction to the oblique and release the other arm. Lovset is not a routine part of a vaginal breech delivery.

Birth of head:

- Allow the infant to "hang" using the weight of the baby to encourage flexion of the head until the nape of the neck is visible.
- Assist birth of head using Mauriceau- Smellie –Viet, Burns Marshall or forceps placed onto head from underneath the body.
- MAURICEAU-SMELLIE-VEIT (MSV) manoeuvre: encourages flexion of the fetal head. Place one hand above the baby with one finger on the fetal occiput and one finger on each of the fetal shoulders. The other hand should be placed below the baby supporting it and 2 fingers should be placed on the maxillae (not in the mouth). The fetal body is raised upward in an arc completing delivery.
- Mauriceau-Smellie-Viet (MSV) manoeuvre for delivery of after coming head
- BURNS-MARSHALL METHOD: Fetal feet/ankles are grasped and with gentle downwards traction, the trunk is carried up over the mother's abdomen
- Application of forceps to after-coming head- In some cases forceps may be required to deliver the fetal head.
    - The head is generally direct OA or no more than 15° left or right.
    - The assistant should gently lift and support the baby without undue traction. Its body can be wrapped in a towel to keep it warm
    - It is important that the fetal back is kept in alignment with the cervical spine and not hyperextended
    - The forceps are placed from underneath the head. Simulation training is a perfect opportunity to practice this technique. Kiellands, Rhodes and Wrigleys have all been reportedly used for this procedure
    - Once the first blade is applied any lateral deviation can usually be corrected to DOA.
    - Once the forceps are applied, check application and lock as next contraction commences
    - Gentle downward traction

- Start upward traction once chin on perineum (evaluate for episiotomy if not already done; usual care and angulation)
- Controlled and slow delivery of head

After delivery:

- Transfer baby to waiting neonatal team – if baby requires resuscitation, otherwise perform delayed cord clamping
- Take a cord PH
- Deliver placenta and repair perineum
- Record cpmprehensive note

Other procedures:

1. Emergency breech extraction (25% RISK BIRTH INJURY)
2. Head entrapment during vaginal breech delivery (more common preterm)
3. Internal podalic version

Bleep 2222- state obstetric and neonatal emergency – ask for consultant obstetrician and neonatologist to attend and inform anaesthetic and theatre staff.

Breech extraction

- Breech extraction is most commonly used for delivery of the second twin following internal podalic version (see below).
- It may only be performed in a singleton breech if there is sufficient concern regarding fetal wellbeing eg pre-terminal fetal heart rate pattern and it is felt it would be unsafe to proceed with a caesarean section at that time.
- Both of your hands are required; one inside and one outside. The uterus should be stabilised with one hand and the second hand is introduced into uterine cavity to grasp both feet if possible but one will do.
- Ensure that it is a foot that is grasped and not the hand. If the hand is extracted by mistake, it should be replaced back and the foot/feet should be located and grasped
- Ideally during a contraction and with maternal effort, pull down the foot/ feet. It is helpful to assist this process by exerting fundal pressure in a downward direction with the second hand.
- Traction should be steady and maintained on the delivered leg(s) until the breech is fixed in the pelvis
- Thereafter, action takes the place of contractions and the breech can then be delivered.
- FORCEPS APPLICATION TO THE AFTER COMING HEAD may be required following breech extraction

Head entrapment during vaginal breech delivery

- Head entrapment during vaginal breech delivery is an obstetric emergency. (Bleep 2222 and state obstetric and neonatal emergency – ask for consultant obstetrician and neonatologist to attend and inform anaesthetic and theatre staff)
- It is typically associated with preterm vaginal breech delivery when the fetal buttocks and trunk pass through an incompletely dilated cervix. The uterus subsequently contracts and clamps tightly around the fetal head.
- Forceps can be used to deliver the after coming head. However, if this fails –
- Re-try Mauriceau-Smillie-Veit (MSV) manoeuvre
- Rotate baby to sacro- transverse
- McRobert's manoeuvre
- Suprapubic pressure
- Tocolysis should be considered (see below)
- Ensure proper documentation
- Cord pH should be obtained
- Debrief the woman postnatally and offer counselling

Internal podalic version (IPV)

This may be necessary to deliver a second twin vaginally, if there is an immediate need to deliver the baby or if the baby is in oblique/transverse lie

- One hand is used to stabilise the uterus externally, and the other hand and forearm is introduced into the lower genital tract
- A fetal foot/feet are identified by recognising a heel through intact membranes
- The foot is grasped and pulled gently and continuously lower into the birth canal. The membranes are ruptured as late as possible. The baby is then delivered by using breech delivery manoeuvres as mentioned earlier as an assisted breech or breech extraction with gentle traction on the bony parts of the pelvis, Lovset's manoeuvre to the shoulders if required and a controlled delivery of the head).
- If arm is extracted by mistake, it should be gently replaced and foot should be identified again
- This procedure is easiest when the transverse lie is with the back superior or posterior. If the back is inferior or if the limbs are not immediately palpable, do not panic, follow the curve of the back and down and round to find the leg. Confirm you have a foot before applying traction. This will minimise the risk of the unwelcome experience of bringing down a fetal hand and arm in the mistaken belief that it is a foot.
- If ultrasound is immediately available to an experienced sonographer this may help identify where the limbs are
- A few seconds of calm consideration and accurate assessment will almost certainly result in an effective delivery manoeuvre.

Tocolysis

- Tocolysis with 0.5 mg Terbutaline or GTN (spray of two puffs equivalent to 400 mcg per puff as first line.
- General Anaesthesia with a high end tidal concentration of volatile agent eg sevoflurane will often produce useful relaxation of the cervix
- GTN increases the risk of PPH.

Emergency surgical procedures:

Incision of cervix

- (Duhrssen's incisions) at 10 and 2 o'clock should be considered to avoid cervical neurovascular bundles which is situated at approximately 3 and 9 o'clock and the bladder and bowel which are at 12 and 6 o'clock.

Symphysiotomy

- Ensure adequate analgesia
- Lithotomy position
- Indwelling catheter to bladder
- Incise skin above symphysis with (if available a solid) scalpel. The top of the symphysis is probed with the tip of the scalpel to identify the non-bony joint,
- The urethra should be kept displaced from midline by finger in the vagina displacing the catheterised urethra laterally
- The scalpel is advanced at 30 degrees from horizontal and advanced vertically towards the vagina until the sharp tip of scalpel is felt by intravaginal finger. Divide the joint by sawing action
- Once joint is separated, catheter is removed and head should be delivered by forceps
- An episiotomy and traction towards the sacral aspect of the pelvis relieves pressure on the unsupported urethra.
- Postnatal referral to physiotherapy and orthopaedics
- Debrief fully and document discussion

Caesarean delivery

After replacement of breech (similar **to Zavanelli manoeuvre** for shoulder dystocia) – see shoulder dystocia guideline.

Documentation/debrief after VBD

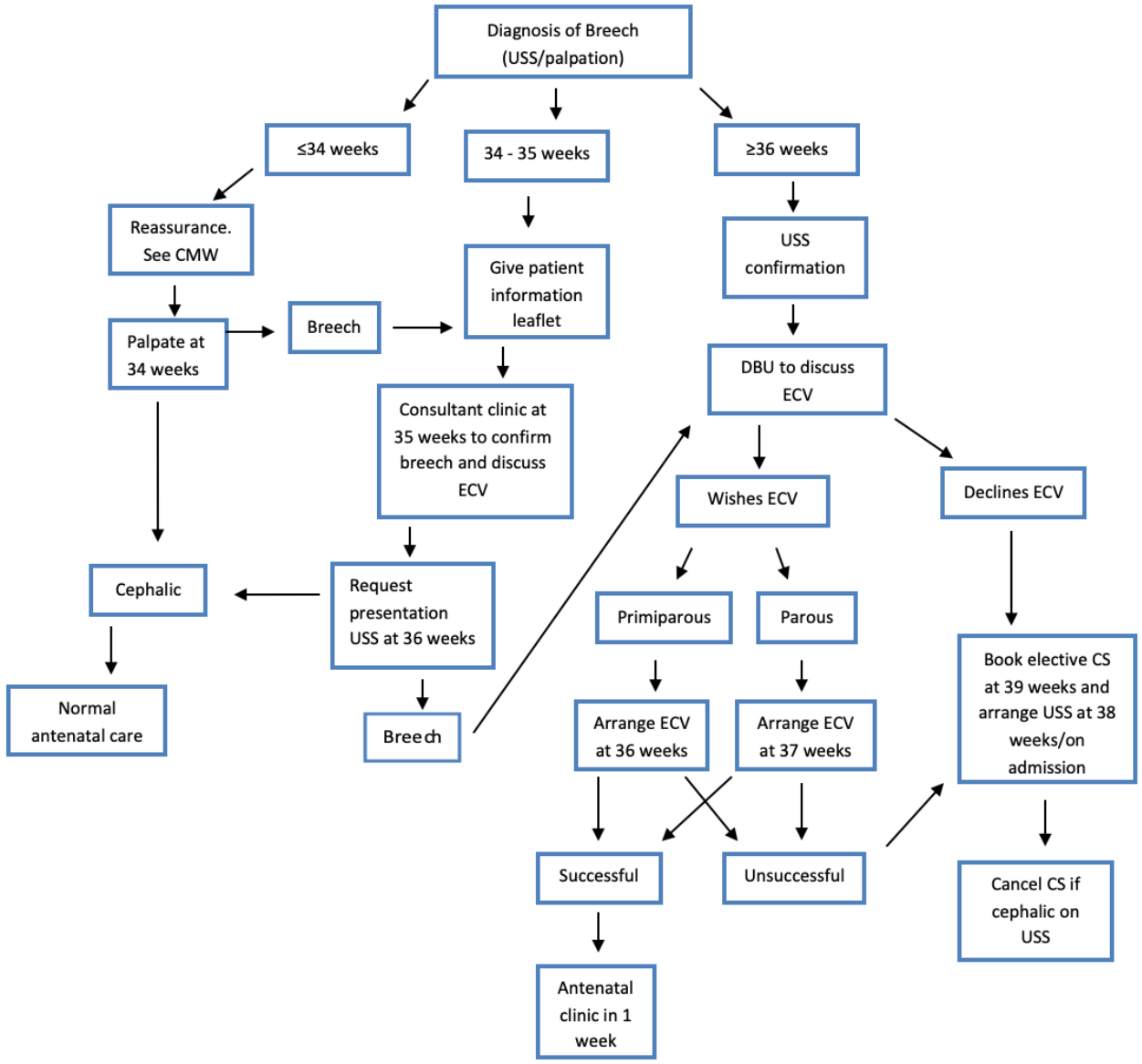
- Careful documentation of the delivery events should be done throughout
- Neonatal team should be present at the time of delivery
- Paired cord pH should be obtained following delivery
- The woman should have an opportunity for debrief before she is discharged home

- Vaginal breech delivery can be very stressful experience for the staff involved as we encounter this situation less frequently, and in most cases, the breech has been undiagnosed until the woman presents in advanced labour or is preterm.
- Documentation of complications will inevitably be retrospective and must be clear.
- It is important to consider that we work as a team and that all the pressure is not on the obstetrician who may be encountering their first actual vaginal breech delivery, however practice with high fidelity simulation eg PROMPT is essential.
- Checklists are recommended for all obstetric emergencies
- A scribe needs to be allocated.
- Document time of call
- Who attended and level of experience?
- Time persons attended
- Manoeuvres attempted and time and by whom.
- Drugs (if any) used
- Debrief team ideally within an hour of event
- Take time to discuss the delivery with the parents and visit the baby if admitted to NNU.
- If complicated delivery, contact patient's consultant to organise postnatal follow up
- Discuss delivery with a mentor of your choice

References

- External cephalic version and reucing the incidence of term breech presentation (RCOG Green Top Guideline 20a). RCOG. March 2017.
- Management of breech presentation (RCOG Green Top Guideline 20b). RCOG. March 2017.

Appendix 1 – management of breech presentation



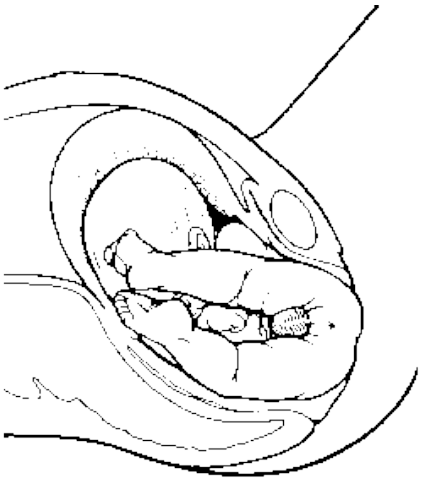
Lead author	G Buchanan	**Date approved**	13/8/25
Version	1	**Review date**	13/8/28

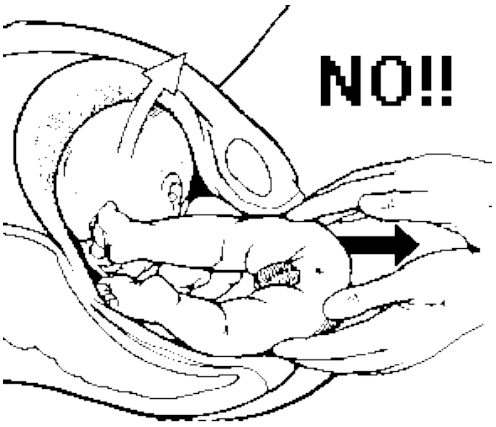
Appendix 2 – management of VBD

Call for help	Activate emergency bell Request experienced midwife, experienced obstetrician and neonatologist
	Request anaesthetist and theatre team to be on standby
Position of mother	Place mother in lithotomy position unless already on all fours and labour advancing
Evaluate for episiotomy	Evaluate for episiotomy when perineum distended by baby's buttocks
Birth of fetal body and lower limbs	**Allow spontaneous birth of the buttocks** (hands off)
	Correct buttocks to sacroanterior
	Allow spontaneous birth of legs (hands off) but, if not progressing, assist release of legs by applying pressure to popliteal fossae
	Allow spontaneous birth of body (hands off) until lower scapulae visible
Birth of arms	**Allow spontaneous birth of arms** (hands off)
	If arms require assistance: Gently hold baby over bony prominences of pelvic bones (not abdomen)
	Keep sacrum/spine anterior
	Rotate trunk (Løvsett's manoeuvre) and sweep fetal arms down using one to two fingers
Birth of head	Allow baby to hang so that shoulders and neck descend over next contraction until nape of neck visible (encourages flexion of head)
	Assist birth of head using Mariceau–Smellie–Veit, Burns–Marshall or forceps placed on to head from *underneath* body
Documentation	Persons present, Manoeuvres used, Timings of actions

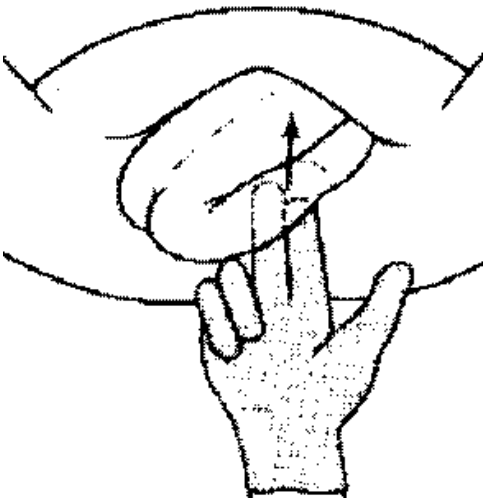
Appendix 3 – management of second stage VBD

1. Allow spontaneous delivery of the buttocks





2. Allow spontaneous delivery of the legs



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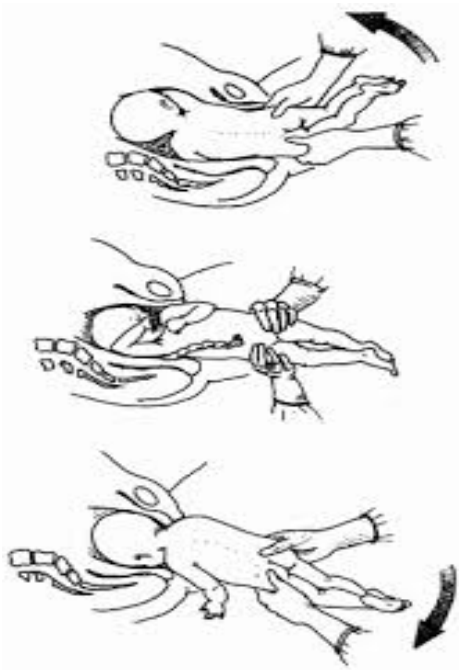
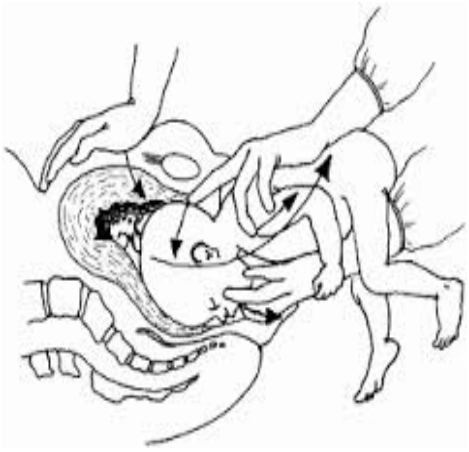
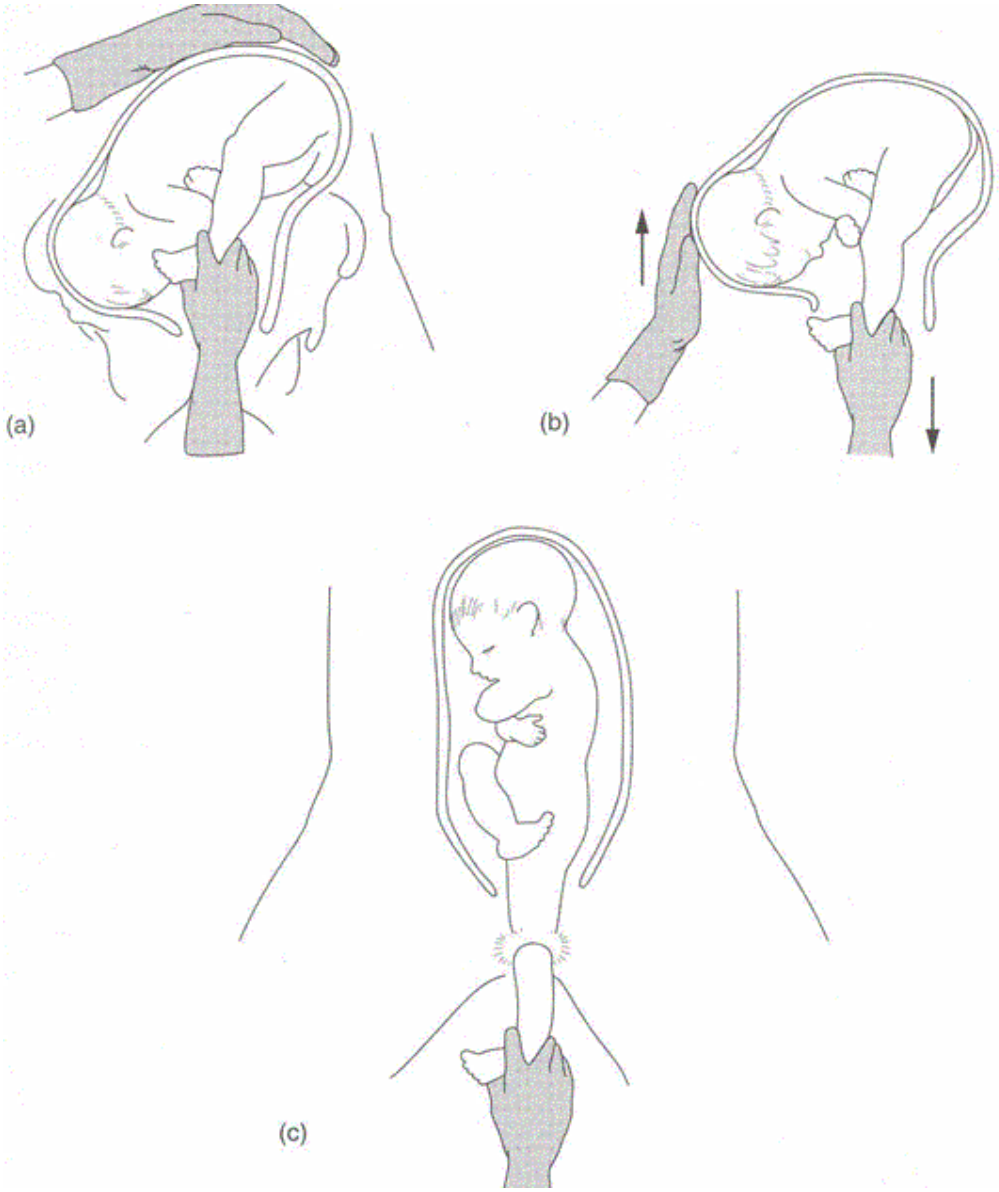
3. Allow the buttocks to spontaneously rotate or gently assist rotation to sacroanterior
4. Allow spontaneous birth of the body (hands off) until lower scapulae visible
5. Birth of arms- Lovset is not a routine part of a vaginal breech delivery



6. Birth of head



7. Forceps application and delivery of after coming head
8. Breech extraction (rarely required)



9. Then continue with manoeuvres for an assisted vaginal breech delivery +/- forceps to aftercoming head.

Clinical governance

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