Worcestershire Acute Hospitals NHS Trust

Management of breech presentation including external cephalic version (ECV)

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Approved by:	Maternity Governance Meeting	
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Key Amendments

Date	Amendments	Approved by

Introduction

3-4% of pregnancies remain in the breech position at term.

The data tends to support that the mode of delivery for primigravid breech should be by caesarean section. However 1 in 6 breeches are not diagnosed until in labour. The optimum mode of delivery for breech presentation diagnosed in advanced labour, preterm breech delivery and breech presentation in second twin remains unclear. It is important that skills in conducting vaginal breech deliveries are maintained as skills may be required not just for above indications but breech vaginal delivery due to maternal choice.

This guideline covers all women diagnosed with breech presentation.

Antenatal Management

Women with a confirmed breech presentation should be reviewed at 36 weeks by an experienced member of staff to discuss on-going options for birth.

The three options for management of breech at term are:

- External cephalic version (ECV)
- Planning for elective caesarean section
- Planning for vaginal breech delivery

Clinicians should counsel women in an unbiased way that ensures a proper understanding of the absolute as well as relative risks of their different options. (RCOG 2017). Selection of appropriate pregnancies and skilled intrapartum care may allow planned vaginal breech birth to be nearly as safe as planned vaginal cephalic birth. (RCOG 2017).
Counselling of women should consist of a discussion around choices and maternal preferences for her on going care and birth. This discussion should include 4 key elements:

- what are the preferences of the woman and why
- what are the choices
- what are the unbiased risks and benefits of each choice discussed in absolute terms (not only percentages)
- what is the woman's potential individual risk and benefit with each option

These options should be discussed fully with the woman and her preference should be recorded in the notes. She should be offered the ECV information leaflet and RCOG breech presentation at birth leaflet and she should have a chance to discuss these with her healthcare professional. This discussion should be recorded in free text in the maternal notes.

Women should be informed that when planning delivery for a breech baby, the risk of perinatal mortality is approximately:

- 0.5/1000 with caesarean section after 39+0 weeks of gestation
- 2.0/1000 with planned vaginal breech birth
- 1.0/1000 with planned cephalic birth.

Women should be informed of the following:

- Women should be informed that planned caesarean section for breech presentation at term carries a small increase in immediate complications for the mother compared with planned vaginal birth. (See caesarean section guideline)
- Women should be informed that maternal complications are least with successful vaginal birth; planned caesarean section carries a higher risk, but the risk is highest with emergency caesarean section which is needed in approximately 40% of women planning a vaginal breech birth. (RCOG 2017)
- Women should be informed that caesarean section increases the risk of complications in future pregnancy, including the risks of opting for vaginal birth after caesarean section, the increased risk of complications at repeat caesarean section and the risk of an abnormally invasive placenta.
- Women should be given an individualised assessment of the long-term risks of caesarean section based on their individual risk profile and reproductive intentions, and counselled accordingly.
- Women should be informed that caesarean section has been associated with a small increase in the risk of stillbirth for subsequent babies although this may not be causal. (New 2017)

Planning the mode of birth will depend upon:

- preference of the woman
- estimated fetal weight (greater than 3.8kg)
- hyperextended head (found on scan only)
- footling presentation
- severe fetal growth restriction
- previous obstetric history (previous caesarean section)
- placental location

External Cephalic Version (ECV)

- Women with a breech presentation at term should be offered ECV unless there is an absolute contraindication. They should be advised on the risks and benefits of ECV and the implications for mode of birth.
- Women should be informed that the success rate of ECV is approximately 50%. (RCOG 2017). Overall success levels are greater for multiparous women (60%) than for nulliparous women (40%).
- Women who have a breech presentation at term following an unsuccessful or declined offer of ECV should be counselled on the risks and benefits of planned vaginal breech delivery versus planned caesarean section.

The following is recommended:

- ECV should only be undertaken by experienced practitioners or trainee practitioners under direct supervision. The ECV should take place in Labour Ward or ECV clinic following an ultrasound scan to confirm breech presentation.

- ECV should be offered from 36 weeks in nulliparous women and from 37 weeks in multiparous women.
- ECV should preferably be performed on a specific day during working hours in labour ward activity on labour ward should be safe to perform the ECV in case of requiring emergency caesarean section
- The procedure should be explained to the woman again to ensure informed consent
- Semi-sitting position to prevent aorto-caval syndrome
- CTG performed before and after ECV even if it fails
- Uterine relaxant should be prescribed by the person undertaking the ECV and administered before the procedure.
- Clinical and ultrasound examination to confirm success or failure of the procedure
- If patients' blood group is Rhesus negative 500 units of anti-D should be given

Complications of ECV
ECV is rarely associated with complications. Large studies suggest a 0.5% immediate caesarean section rate with no excess perinatal morbidity and mortality.

Intrapartum Care

Planned Caesarean Section for Breech Presentation

- Decision to deliver by planned caesarean section should be made by an experienced obstetrician after a full, unbiased discussion with the woman.
- If caesarean section is planned for breech presentation only, it should be booked after 39 weeks of gestation to avoid any risks of prematurity.
- An ultrasound scan should be performed before transfer to theatre to confirm presentation. The woman should have been informed that, in the case of confirmed cephalic presentation, where breech was the only indication for caesarean section, that the caesarean section will be cancelled and the woman advised to return home and await spontaneous labour.
- If labour starts before the booked date, an emergency caesarean section should only be performed following an ultrasound scan to confirm presentation, assessment and further discussion with the woman, as evidence for optimum mode of delivery for breech presentation in advanced labour remains unclear.

If Diagnosed at Home
On diagnosis of a breech presentation, in labour, an ambulance MUST be called immediately via 999 with a view to transferring the woman to hospital with paramedic support.

Avoid rupturing the membranes but if ruptured a vaginal examination should be performed to assess:

- Cervical dilatation
- Position and type of breech presentation (sacro-posterior position is rare but very difficult to deliver).
- Determine station of the breech
- If the delivery is imminent the midwife should immediately call for back up support by 999 and inform the labour ward of the situation.
- Labour ward should be informed of the transfer and reason so that appropriate staff can be alerted at the receiving unit i.e., obstetrician, anaesthetist and paediatrician.
- All observations and actions taken should be recorded in the labour notes (a scribe can be used if the midwife is busy (e.g. ambulance technician).
- A copy of the ambulance records should be filed in the woman's hospital notes.

- In the event of spontaneous birth, the basic principle is to avoid unnecessary intervention. "Hands off the breech"

Imminent Delivery En-Route- The Ambulance Should Stop and Pull Over

- The woman should adopt most appropriate position depending upon the availability of space and skills of the midwife.
- See below for different manoeuvres for vaginal breech birth

If Breech Presentation Suspected/Diagnosed In Hospital

- Where a woman presents with an unplanned vaginal breech labour, management should depend on the stage of labour, whether factors associated with increased complications are found, availability of appropriate clinical expertise and informed consent. (RCOG 2017)
- Women near or in active second stage of labour should not be routinely offered caesarean section. (RCOG 2017)
- Where time and circumstances permit, the position of the fetal neck and legs, and the fetal weight should be estimated using ultrasound, and the woman counselled as with planned vaginal breech birth. (RCOG 2017)

If woman chooses trial of vaginal breech delivery, on-call consultant should be informed, who may need to be present for delivery if the midwife or registrar is not sufficiently experienced in vaginal breech delivery.

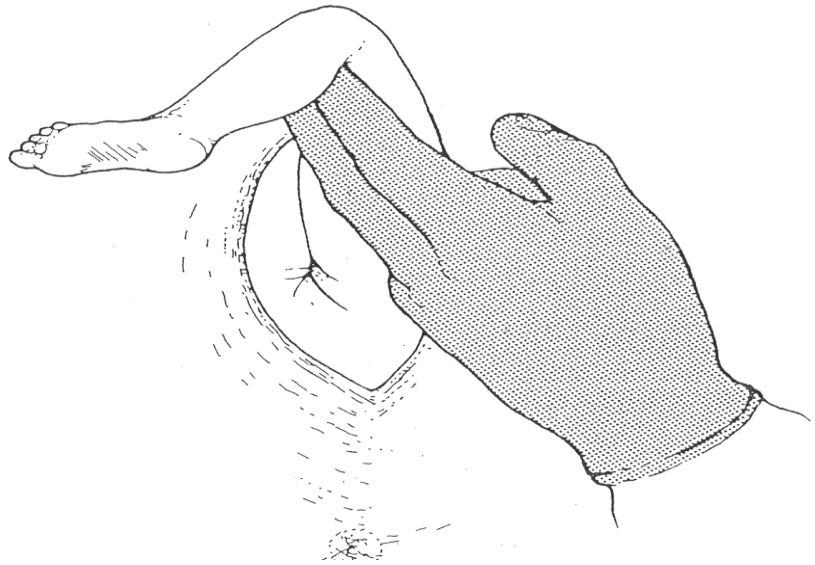
- Intravenous access and preoperative procedures are not routinely required for vaginal breech birth
- Discuss woman's preferred choice of analgesia. Epidural is not required for vaginal breech birth
- On call anaesthetist should be informed of r second stage
- Benefits of continuous EFM for breech birth is unclear (RCOG 2017).
- Manage first stage as in cephalic presentation
- The passage of meconium, except at the point of delivery, has the same significance as in cephalic presentation
- Augmentation of labour should be a consultant decision after discussion with the woman
- If poor progress in first or second stage, consider caesarean section
- Second stage may be confirmed by vaginal examination
- Adequate descent of the breech in the passive second stage is a prerequisite for encouragement of the active second stage. (RCOG 2017)
- Encourage the woman to adopt a comfortable position for birth. "All fours position" may be considered depending on the skills of the midwife or obstetrician involved
- The breech presentation should be allowed to descend to the pelvic floor without active pushing
- If episiotomy is indicated it should be performed when buttocks are distending the perineum to allow further manoeuvres which may be necessary to assist delivery**. "Hands off the breech" until it has delivered as far as the umbilicus**, only release a loop of cord if it is under tension
- A paediatrician should be present during delivery in hospital
- The basic principle is to avoid unnecessary interference. Hands off the breech!
- See below for different manoeuvres for vaginal breech birth
- Ensure that breech proforma is completed
- Collect cord gases where possible

Preterm Breech
There is much debate as to the appropriate mode of delivery for pre-term breech <34 weeks and all cases should be discussed with the Consultant.

Manoeuvres for Assisted Vaginal Breech Delivery
All manoeuvres used during breech delivery should be clearly documented including which arm/ leg (right or left) is manoeuvred.

Extended Legs Occasionally in a primigravid woman the legs of the delivering breech may be extended, splinting the breech. This can lead to delay in the descent of the buttocks. You need to assist in delivery of the legs:

- Place a finger in each of the baby's groins
- Apply gentle pressure to assist descent of the buttocks
- Apply gentle pressure behind the knees when the popliteal fossa is seen which will aid delivery of the legs



Assisting delivery of extended leg by pressure on popliteal fossa

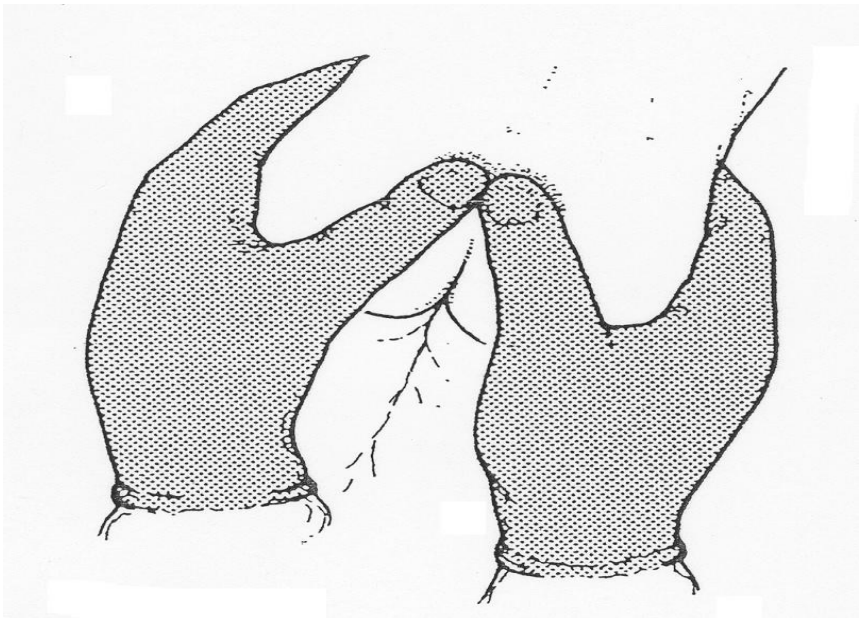
Extended Arms
If the baby's arms are not folded across the chest they are likely to be stretched up alongside the head. You need to rotate the baby's body to bring the posterior shoulder into an anterior position to be delivered under the pubic arch using Lövsets Manoeuvre.

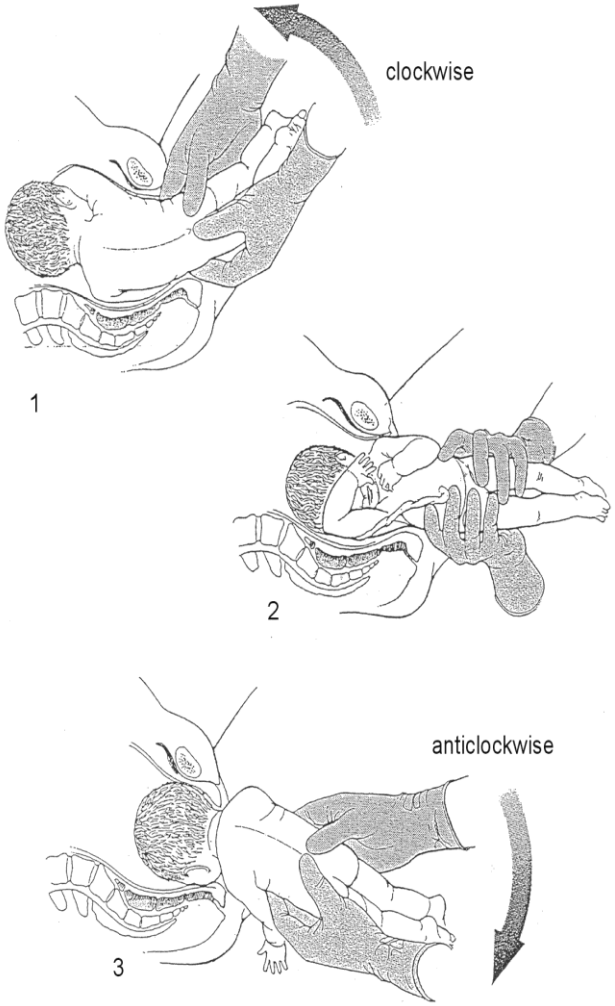
Lövsets Manoeuvre

- Hold the baby firmly but gently around the pelvis
- Rotate the body 180°
- Keep the baby's **BACK UPPERMOST**
- The posterior shoulder is now lying under the symphysis pubis
- Splint the humerus and draw it down over the chest with the elbow flexed to facilitate delivery

- Rotate the baby back through 180° KEEPING THE **BACK UPPERMOST**
- The second arm can be delivered in the same way

Lövset's manoeuvre for delivery of extended arms





Nuchal Arm

In this position, the shoulder is extended and elbow flexed so that the forearm is trapped behind the occiput. This usually occurs due to inappropriate traction and rotational manoeuvres at an earlier stage in the delivery. To overcome this problem fetal trunk is rotated in the direction of fetal hand. The occiput thus rotates past the arm and, with further rotation; flexion of the shoulder should occur and allow delivery of the arm.

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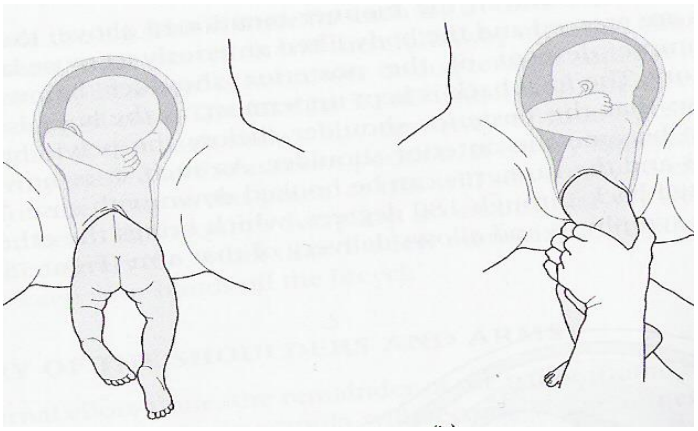
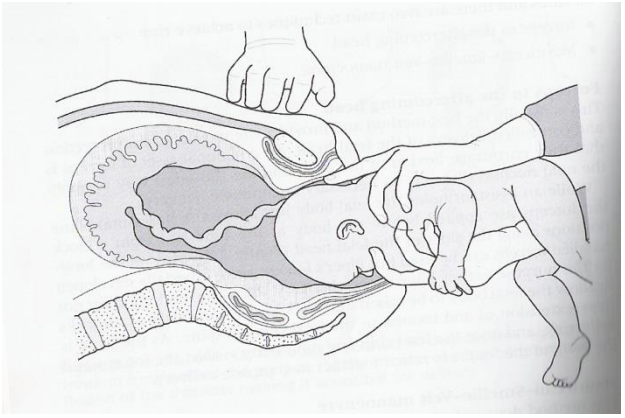


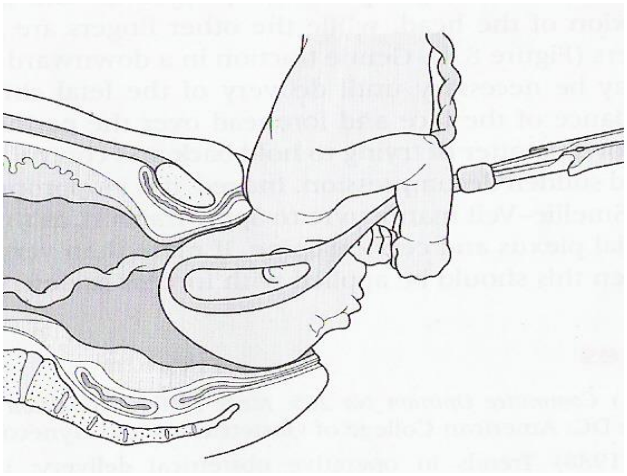
Delivery of After coming Head of Breech

Mauriceau Smellie Veit manoeuvre.



- Controlled delivery of the head is vital to avoid any sudden change in intracranial pressure. You can assist delivery of the head using Mauriceau Smellie Veit manoeuvre.
- Place the baby over your forearm supporting the baby's chest with the palm of your hand.
- NB: **Do NOT put finger in baby's mouth –** there is a risk of causing trauma and will not aid flexion of the head. Place your first and second fingers on the baby's cheek bones.
- With the other hand place your first and third fingers over the baby's shoulders to apply traction, whilst the middle finger presses on the occiput to aid flexion and descent.
- When the face distends the perineum apply upward traction until the mouth and nose are free, the head can now be delivered slowly.

Forceps delivery of the head (Hospital deliveries)
An assistant should hold the baby just above the horizontal plane and forceps are applied below the body. It is important not to allow the fetal body to be raised much above the horizontal, as this risks hyperextension of and trauma to fetal cervical spine. As the head is delivering, and once the fetal chin and mouth are visible, the forceps and the body of the fetus are raised together to complete delivery.



Entrapped head after preterm breech delivery.

- Catheterise the bladder
- Perform McRoberts manoeuvre – this may release the head
- Ask the assistant to apply firm suprapubic pressure to encourage flexion of the head
- Acute cervico-uterine relaxation by using terbutaline 250 microgram subcutaneously or GTN 1 x 400microgram puff sublingually to help in stretching or dilating the cervix
- Duhrssen cervical incisions (Hospital deliveries only). If the above measures fail cervical incision at 2 &10 o'clock may facilitate the delivery of fetal head but risk massive maternal haemorrhage. Care should be taken as these tears may extend into lower segment.
- Mento-anterior position: Delivery of entrapped head is more difficult if in a mento-anterior position. Rotation and flexion of the fetal head may not be possible. Laparotomy and hysterotomy may be required.

Correct and Acceptable Fetal Manipulations

- ✓ Antecubital fossa (to flex elbow)
- ✓ Popliteal fossa (to flex knee)
- ✓ Pelvis (traction and rotation)
- ✓ Ankle (traction)

Incorrect and Unacceptable Fetal Manipulations

- Avoid the wrist or hand.
- Axilla
- Abdomen
- Chest

Upright Breech Birth

Standing is not recommended for breech birth. All fours may be a comfortable position for women to birth in, dependent on attending midwife or obstetric experience.

Appendix 1

Affix Patient Label here or record

NAME: . . . . . .

NHS NO:

HOSP NO:

D.O.B: D D / M M / Y Y Y Y MALE ☐ FEMALE ☐

WARD:.....CONS:.....

Worcestershire NHS
Acute Hospitals NHS Trust

EXTERNAL CEPHALIC VERSION (ECV) PRO-FORMA

To be completed for all women with a breech presentation, when discussing mode of delivery (See WAHT-OBS-019)

Gravida Parity	Blood group and rhesus status
Previous mode/s of delivery	**BMI**
Presentation on scan: (please circle) Extended breech Footling breech Flexed breech Unknown breech	

Contraindication to ECV (please circle any that apply)

Absolute contraindication for ECV:

- Where caesarean section required
- Antepartum hemorrhage within the last 7 days
- Abnormal cardiotocography
- Major uterine anomaly (including fibroids)
- Ruptured membranes
- Multiple pregnancy (except delivery of second twin)

Relative contraindication where ECV might be more complicated:

(need to discuss with Consultant Obstetrician prior to offering to woman)

- IUGR
- Proteinuric pre-eclampsia
- Oligohydramnios
- Major fetal anomalies
- Scarred uterus (previous CS/Myomectomy-discuss with Consultant Obstetrician)
- Unstable lie

Other (Please document):

Options discussed: (please circle)
ECV
Vaginal breech
C/S
(ECV's to be performed >36/40 for primps; >37/40 for multips)

Information leaflet provided **YES/NO**

Name and grade of person completing form (please print)

Affix Patient Label here or record

NAME: . . . . . .

NHS NO:

HOSP NO:

D.O.B: D D / M M / Y Y Y Y MALE ☐ FEMALE ☐

WARD:.....CONS:.....

ECV Pro-forma (To be completed in all women attending for ECV)

Scan findings (please circle) Cephalic Extended breech Footling breech Flexed breech Transverse Oblique	Gestation
ECV offered? (please circle) YES/NO (If not why not)	ECV accepted/declined (please circle)
CTG performed before ECV? (please circle) YES/NO Classification: Normal/suspicious/pathology	CTG performed after ECV? (please circle) YES /NO Classification: Normal/suspicious/pathology
Terbutaline given prior to ECV? (please circle) YES/NO	Anti D given? (please circle) YES/NO/ NOT INDICATED
Consent taken YES/NO VERBAL/WRITTEN	
Outcome of ECV	
Complications? (if yes please document)	
Operator name and grade (please print)	