

OPTIBREECH PRACTICE GUIDELINE

BACKGROUND

Women who choose to plan a vaginal breech birth want that birth to be as safe as possible for both their baby and themselves. They have been fully counselled about the potential need for assistance or an intrapartum CS, and these should be used as necessary when the safety of the clinical situation is uncertain.

OptiBreech care is based on evidence that care from a proficient practitioner, throughout the care pathway, is likely to improve neonatal outcomes and increase the vaginal birth rate among women who desire to give birth vaginally. Where OptiBreech-specific principles of care are not covered in this guideline, clinicians should use national and local guidelines to guide practice.

DEFINITION OF PROFICIENCY

A professional is considered currently proficient to lead OptiBreech care if they have:

- 1) Participated in 6 hours of evaluated physiological breech birth training;
- 2) Attended at least 10 vaginal breech births, including resolution of complications using manual manoeuvres;
- 3) Attended or taught in simulation at least 3 vaginal breech births within the past year;
- 4) Delivered physiological breech birth training at least once within the past year, including reflective reviews of births attended;
- 5) Completed an OptiBreech Proficiency self-assessment and indicated that they feel competent to implement the OptiBreech Practice Guideline at vaginal breech births where they are the designated clinical lead, and this has been confirmed by the Breech Leads.

A fully proficient OptiBreech team practitioner should be present for a minimum throughout second stage and have overall clinical responsibility for each birth within the OptiBreech care pathway. The role of the OptiBreech team member is to provide clinical leadership as part of a team. They will not normally also be responsible for providing hands-on care, unless another OptiBreech team member is also present.

COMMENCE BREECH PATHWAY

36 weeks gestation

The OptiBreech care pathway begins at 36 weeks of pregnancy. This is because breech presentation at term, in the absence of other complications, is regarded as a 'variation of normal.' Women are **not** encouraged to try to turn their babies, through moxibustion, postural exercises, acupuncture or external cephalic version. However, if they are drawn to those modalities, they are not discouraged from using them and should be given safety advice and support.

When women are booked for a presentation scan, they should be offered information about the OptiBreech Care study prior to their scan appointment. This is to enable them to make an informed decision about participation in the study.

In the OptiBreech care study, if women are referred for breech care prior to 36 weeks, they consent to participation in the study following diagnosis and are randomised to OptiBreech care, they should be counselled following randomisation as usual. Counselling should follow the Pro Forma included in the CRF.

They should be offered the following 3 options:

- 1) Carrying on as normal and continuing to plan a vaginal birth, while receiving the remainder of their pregnancy and birth care from the OptiBreech team, co-ordinated by the Breech Specialist Midwife;
- 2) Attempting an ECV according to the local guideline but remaining under OptiBreech care and planning a VBB if it is unsuccessful; or
- 3) Declining OptiBreech care and being referred back to the 'usual care' pathway, including the usual care ECV service or planned CS and pregnancy care by their named midwife.

Women are able to return to the OptiBreech pathway at any time if they change their mind and wish to plan a VBB. Women within the OptiBreech pathway are also able to return to 'usual care' or plan a CS at any time if they change their mind.

BIOMETRIC GROWTH ULTRASOUND SCANS

Women whose babies are diagnosed in breech presentation at the end of pregnancy should be offered a full biometric growth ultrasound scan, performed by a sonographer or other professional with equivalent qualifications. Ideally, this should be performed around 36 weeks of pregnancy. Decisions about mode of birth and the timing of an end-of-pregnancy elective caesarean section or induction, in the event of no labour, should be made on the basis of this initial ultrasound and expected growth trajectory. Additional growth scans should only be performed where standard antenatal screening suggests concerns about fetal growth or well-being, as the accuracy of such scans diminish in later gestations. Point-of-care bedside scans should be used to inform care as needed.

Women who decline a full biometric growth scan are still eligible to participate in the OptiBreech Care study, including randomisation, if otherwise eligible based on other clinical findings.

LABOUR CARE

All members of the intrapartum team should be made aware of this guideline and ideally should have received information about it during their mandatory training. Hands-on labour care should be provided by someone who has received physiological breech birth training, either through the OptiBreech training or as part of their mandatory training package. One member of the intrapartum care team who has completed the enhanced OptiBreech training should be designated the role of lead, and it is their responsibility to maintain the 'helicopter view' of the birth.

MONITORING

Follow the NICE Guideline on Intrapartum Care for Healthy Women and Babies for monitoring and assessment of progress in labour. Continuous fetal monitoring should be offered, but a woman's preference for intermittent monitoring should be respected. Where external monitoring is expected to be difficult (e.g. elevated BMI, longer second stage, etc.), consider use of a fetal electrode, taking care to avoid the genital area on application.

PROGRESS IN SECOND STAGE OF LABOUR

Descent is assessed by the station of the fetal buttocks. Provided fetal heart monitoring shows no evidence of compromise nor diminished reserves, a passive second stage of up to 2 hours is acceptable and advised if the woman has an epidural in situ. After 2 hours of passive second stage, the buttocks should be visible at the introitus; otherwise, a CS should be recommended. Following

descent to 'rumping' (+3 station, anus and both buttocks visible), the birth should normally be complete within 7 minutes.

A passive second stage is also acceptable with no epidural, but do not instruct women to resist a spontaneous urge to push. If after one hour of active pushing the buttocks are not visible at the introitus consider the need for a CS unless the fetal heart rate is completely normal and there has been considerable descent in this time. Risk of an adverse outcome increases with each 30 minutes of active pushing; this should be considered in light of evidence of fetal well-being.

During emergence, maintain awareness of normal intervals. Accurate fetal heart rate monitoring is very difficult, and cord occlusion very likely. Use the Physiological Breech Birth Algorithm as a guide for which interventions are indicated and when. Most vaginal breech births are complete within 7 minutes of 'rumping' (both buttocks remaining visible on the perineum between contractions, or +3 station), including time for hands-on interventions if indicated. An episiotomy is not indicated until this point, if at all.

If an episiotomy does not result in the birth of the pelvis and clear progress, an urgent CS is indicated. Care should be taken to elevate the fetal pelvis using pressure on the pelvic bones only, to avoid perineal or genital damage. A fetal pillow may assist in preventing trauma, but elevation is not expected to be difficult unless the pelvis has been born.

If a pause of 30 seconds or more occurs once the pelvis is born, encourage the woman to move and/or push actively. Do not instruct the woman to wait for the next contraction to push at this stage. If maternal movement and effort do not result in immediate progress, assume this is due to obstruction and assist the birth as appropriate. Once intervention has been initiated, the attendant should continue to assist the birth until the baby is born.

Where progress has been rapid up to the umbilicus, the birth should be complete within 3 minutes of this point, including time for hands-on assistance if indicated. A member of the intrapartum team should be designated to be prepared to assist the lead professional, where required (e.g. buttock lift, assisting with elevation to higher station if head is extended at inlet, applying fetal pillow, etc.).

NEONATAL CARE

Breech presenting babies often appear depressed at birth due to acute cord compression at the end of labour. NICE guidance should be followed regarding optimal cord management. The cord **MUST NOT** be clamped prior to 1 minute following birth, unless the cord has ruptured or the FH is confirmed by stethoscope to be <60 bmp and not improving. This is to avoid the risk of a reflex bradycardia, to which breech babies appear particularly vulnerable. The neonatal team should be encouraged to come to the bedside to make this assessment. If neonatal condition indicates that resuscitation is necessary, inflation breaths should be initiated with a bag and mask, with the umbilical cord remaining intact. In most cases, the release of cord occlusion and placental resuscitation will lead to immediate improvement in neonatal condition. If inflation breaths are unsuccessful or further resuscitation is required, transfer the baby to the neonatal team.

A member of the neonatal team should be called to attend all vaginal breech births. A member of the intrapartum care team should be designated during labour with the role of obtaining cord blood samples from the intact cord and initiating resuscitation on the bed or beside it, using a bag and mask or bedside unit, should these be required.

SPECIAL CLINICAL SITUATIONS

CARE OF NON-EXTENDED BREECH PRESENTATION

Very little high-quality evidence exists to guide care of non-extended (non-frank) breech presentation in labour. For women under OptiBreech care, care should conform to the Principles of Physiological Breech Birth, which focuses on careful evaluation. In these cases, the cervix will dilate with pressure from the fetal buttocks, regardless of where the legs are. In a full term, symmetrically grown fetus, the bitrochanteric diameter is also expected to be 10 cm.

For any non-extended breech presentation (flexed, semi-flexed, kneeling, dropped foot), counsel the woman about the increased risk of cord prolapse and encourage her to alert someone if she feels anything in her vagina. Offer intravenous cannulation. The increased risk of cord prolapse for breech is not associated with an increase in adverse outcomes, as long as it is anticipated and action taken as necessary. Monitor the fetal heart rate closely, according to standard guidelines.

If a foot is felt below the buttocks in labour, this is not an automatic indication for a CS in labour, unless the lie is not longitudinal. Assess descent according to the buttocks as usual, performing only the minimum number of vaginal examinations required. It is common for a flexed breech baby to

drop a leg down as the cervix dilates and more space becomes available underneath the sacrum. Descent will normally not begin until the buttocks have fully dilated the cervix. The mechanisms will be similar to any other breech birth, with the sacrum descending in a transverse position.

When one or both knees present, the sacrum often descends in a posterior position. This is also not an automatic indication for a CS in labour. Advise the woman about the increased risk of cord prolapse as per above. The presenting part(s) will rotate on the perineum, and you should expect the sacrum to emerge in a transverse position as per usual. There is no need to extract the legs if progress is normal and there are no concerns about fetal condition. If progress arrests on the perineum and fetal leg extraction appears to be needed, care should be taken to sweep down the leg across the body, with buttocks remaining in situ until after extraction, and not to pull on the foot.

FETAL SIZE

Women should be advised that the strongest evidence for an increased perinatal risk is for small babies (<2.5 kg, <10th centile). These babies are more likely to have an underlying problem, and even where size is constitutionally small, may have fewer reserves.

Women should be advised that the evidence from centres where upright breech birth is practiced does not indicate increased neonatal risk or maternal birth injuries for larger breech babies (>3.8 kg). However, an intrapartum caesarean section is more likely.

Fetal size should be considered holistically, taking account of the overall consistency of growth trajectory as an indication of fetal well-being and ability to cope with labour.

PRIOR CAESAREAN SECTION

Women should be advised that outcomes for breech births after a prior caesarean section are similar to those for nulliparous women.

ASSESSMENT OF FIDELITY

Each of these recommendations will be assessed using the information provided about births in the OptiBreech eCRF.