BREECH BIRTH

DIAGNOSIS

There are generally three classifications of breech presentation:

- Frank (hips flexed, legs extended)
- Complete (hips and knees flexed, legs not below fetal buttocks)
- Footling (one or both feet presenting)

Breech presentation occurs in 3-4% of term pregnancies, and 15% of pregnancies between 29 and 32 weeks gestation. 25% of breech presentations will undergo spontaneous version after 35 weeks gestation, the likelihood of spontaneous version decreases with increasing gestational age.[1]

Breech presentations are usually diagnosed clinically.

There should be suspicion of a breech presentation if:

- on abdominal palpation the presenting part is irregular/not ballotable
- head is not felt in the pelvis on vaginal examination
- fetal heart rate is recorded high on the abdomen
- thick meconium is present at the time of SROM
- in the event of cord prolapse

Causative factors include:

- polyhydramnios
- multiparity
- multiple pregnancy
- prematurity
- uterine anomalies (eg. bicornuate uterus, fibroids)
- placental anomalies (eg. placenta praevia)
- fetal anomalies (eg. hydrocephalus)

PRE-TERM (37 WEEKS)

Breech presentation is a normal finding in the preterm pregnancy. No further management in the uncomplicated pregnancy is required until 37 completed weeks of pregnancy are reached.

The optimal mode of birth for preterm breech has not been fully evaluated in clinical trials and the relative risks for the preterm infant and mother remain unclear.[2]

If a woman presents in preterm labour with breech presentation it is reasonable to consider vaginal birth if:

- vaginal birth is imminent
- survival and least morbidity to the fetus is assessed to be unchanged by mode of birth
- maternal morbidity of caesarean section is assessed to be too great for the potential fetal advantages

If elective preterm birth is indicated the mode of birth is dictated by clinical circumstances, for example severe IUGR or pre-eclampsia, elective caeserean section may be most appropriate, versus IUFD or severe fetal anomaly, where vaginal birth may be most appropriate.

TERM (> 37 WEEKS)

An ultrasound scan should be performed to confirm presentation and exclude possible causative factors.

If a woman presents at 37 weeks gestation or greater with a breech presentation, her LMC should recommend a consultation with a specialist obstetrician.[3]

A specialist obstetrician should counsel the woman with regards to ECV, planned vaginal breech birth and planned caesarean section.

ECV

Current evidence suggests attempting ECV, in those women without contraindications, reduces the number of breech presentations in labour and the number of caesarean sections for breech presentation with no increase in perinatal, fetal or maternal morbidity.

Please refer to CWH ECV guideline: ECV Guidelines GLM0016

ELECTIVE CAESAREAN SECTION VS VAGINAL BIRTH

Parents should be informed of the benefits and risks for both current and future pregnancies, of planned caesarean birth versus planned vaginal breech birth at term to enable informed decision making.

The Term Breech Trial (TBT) found that compared to vaginal birth planned caesarean section was associated with a decrease in the short term perinatal and neonatal morbidity and mortality. There was no difference in the outcome between the two groups at the two year follow up. However, the selection criteria for vaginal breech birth, the trial compliance, and analysis in the TBT has been questioned.

The PREMODA study (2006) assessed French and Belgian practices in breech presentation including their consequences for mother and baby. The results indicated that with specific selection criteria, there was no significant difference between the 2 groups in perinatal mortality, neonatal mortality, and severe neonatal mortality.

In 2006, the American College of Obstetricians and Gynecologists (ACOG) recommended that vaginal breech birth may be acceptable under specific circumstances.

CRITERIA FOR PLANNED VAGINAL BREECH BIRTH

- No contraindication to vaginal birth (eg placenta praevia, compromised fetus)
- Pelvis is clinically adequate (clinical judgment is adequate, no role for routine pelvimetry)
- Frank or complete breech presentation
- Estimated fetal weight (EFW) > 2500g and < 4000g
- Neck is not hyperextended in labour (by ultrasound)
- No previous caesarean section
- Emergency caesarean facilities are available
- **Appropriately prepared and experienced clinicians are available for the birth**

NB. Diagnosis of breech for the first time during labour is not a contraindication for vaginal breech birth

INDUCTION/AUGMENTATION

- Opinion on induction of labour varies. It is preferable that labour be spontaneous. Individual cases must be discussed with a Consultant. If induction is considered, ARM and oxytocin is preferable to prostaglandins.
- Opinion on augmentation of labour varies. Augmentation of labour should be done with caution and only after discussion with an Obstetric Consultant.

MANAGEMENT OF LABOUR AND BIRTH

First Stage

- Continuous electronic fetal monitoring (EFM) by cardiotocography (CTG) monitoring is recommended
- Epidural analgesia is not routinely recommended; women have the same choice of analgesia as those having a cephalic birth
- Adequate progress is required to continue with labour
- A scalp electrode can be applied to the presenting breech
- Opinion on fetal blood sampling varies, however the prevailing opinion is that it can be undertaken but only after discussion with an Obsteric Consultant

Second Stage

- Continuous EFM by CTG monitoring is recommended
- Confirm full dilatation and position of breech
- Up to 60 minutes passive second stage, as defined by full dilatation without spontaneous urge to push, is acceptable for passive descent providing the CTG is normal
- Active pushing should ideally not be encouraged until presenting part is distending the perineum
- Caesarean section should be considered if there is delay in descent at any stage in second stage
- Optimal maternal position for birth is upright, but position may be guided by what the birth attendant is most comfortable/experienced with
- Episiotomy should be considered to facilitate birth when indicated. There is no clear evidence that selective episiotomy should differ from cephalic birth. The episiotomy should not be performed until the fetal anus is birthed
- Spontaneous birth of the trunk and limbs by maternal effort should be awaited as breech extraction can cause extension of the arms and head - breech extraction should not be routinely used
- If there is delay in birth, advanced manoeuvres can be undertaken by suitably trained practitioners to aid birth dependent on the cause for example Lovset's manoeuvre and Mauriceau-Smellie-Veit manoeuvre
- A Consultant should be present for the birth
- A Neonatal Consultant or credentialled Senior Registrar/CNS Advanced should be present at the birth
- An anaesthetist should be available for the birth

Entrapment of the head

This is an extreme emergency which may occur where there is poor selection of cases for vaginal breech birth or where a woman presents to the maternity facility with a partially birthed baby.

Ensure sufficient midwifery and anaesthetic support available, prepare for immediate caesarean section.

- A vaginal examination should be undertaken to determine if a rim of cervix is still present which may prevent the head from descent or birth. Once recognised the cervix can usually be pushed over the head.
- If the fetal head has entered the pelvis, perform Mauriceau-Smellie-Viet manoeuvre combined with suprapubic pressure from an assistant in a direction that maintains descent and flexion of the head.

- Rotate the fetal body to a lateral position and apply suprapubic pressure to flex the fetal head.
- Apply traction then rotate the fetal back to sacroanterior position and birth after coming head by Neville-Barnes forceps (or clinicians preference).

If above unsuccessful consider alternative manoeuvres:

- Reassess cervical dilatation. If cervix is not fully dilated (especially if preterm) consider Duhrssen incision at 2, 6 and 10 o'clock
- If unsuccessful, symphisiotomy should be performed by an experienced clinician
- Alternatively, a caesarean section may be performed in operating theatre if the baby is still alive. It is necessary for the baby to be pushed from below and the use of a vacuum has been described to assist

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Written/Authorised by: Maternity Guidelines Group
Review Team: Maternity Guidelines Group

Breech Birth
Maternity Guidelines
Christchurch Women's Hospital
Christchurch New Zealand