Breech Birth

Obstetric Emergency Workshop
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Breech Presentation - Types

A

B

C
Breech Presentation - Types

• A = Hips Flexed, knees Extended also known as ____________________

• B = Hips Flexed, Knees Flexed also known as ____________________

• C = At least one Hip extended also known as ____________________

• (if one knee is extended and one knee flexed ____________________)
Good Predictors

- Buttocks presenting
- Spontaneous labour
- Progress through labour without oxytocics
- Once fully dilated – push the buttocks out unassisted
- Fetal heart rate remains reassuring throughout
Bad predictors – proceed to C/S

- Need for induction
- Footling breech
- IUGR or compromised fetus
- Progress in labour very slow or stops
- Unable to push the buttocks out
- Non reassuring fetal heart rate
- Suspected fetal macrosomia
- Suspected inadequate pelvic outlet
- Mother or Obstetrician do not feel comfortable
Ultrasound: useful information

- Estimate fetal weight
- What is presenting. (? Buttocks / cord / feet)
- Exclude hydrocephalus
- Exclude neck hyperextension
- Locate placenta – make sure not praevia
Analgesia during labour

- Maternal preference regarding the use of Epidural.
Location and Staff

- In a hospital with ready access to OT for C/S Including anaesthetists and theatre staff
- Fetal monitoring equipment
- Adequate neonatal resuscitation equipment
- Paediatrician should be present
- Experienced obstetrician
Vaginal breech labour should be conducted in a hospital with facilities for emergency caesarean section.

Augmentation is not recommended.

Epidural anaesthesia should not be used routinely.

Continuous fetal heart rate monitoring should be offered.

Fetal buttock blood sampling is not indicated.

Delay of descent in the 2nd stage is an indication for caesarean section.

Women should be advised that, as most experience with vaginal breech birth is in the dorsal or lithotomy position, that this position is advised.

Episiotomy should be used when indicated.
Management of Breech Presentation at Term

Background

Between three and four per cent of singleton fetuses will present by the breech beyond 37 weeks of gestation, with the majority of these presentations being detected prior to labour.1 The issue of how to manage and plan delivery in this situation has been controversial, with much of the debate centered around a study by hazards and colleagues, the ‘Term Breech Trial’. This trial described below, has changed clinical practice with as many as 80 per cent of breech presentations at term now delivered by caesarean section.2

Objective

This review group sought to answer the following question:

‘What is the most appropriate mode of delivery for a singleton fetus at term in breech presentation in Australian and New Zealand hospitals?’

Evidence summary and basis for recommendations

The most widely quoted study regarding the management of breech presentation at term is the so-called ‘Term Breech Trial’.1 Published in 2000, this trial compared a policy of planned vaginal delivery with planned caesarean section for selected breech presentations. It reported that perinatal mortality and serious neonatal morbidity were significantly lower in the planned caesarean section group (1.6 per cent) compared to the planned vaginal birth group (5 per cent) (RR 0.33, p<0.001). Perinatal death occurred in 0.3 per cent of planned caesarean births and 1.3 per cent of all planned vaginal births (RR 0.23, p<0.01), while serious neonatal morbidity occurred in 1.4 per cent of planned caesarean births versus 3.8 per cent of planned vaginal births (RR 0.36, p<0.0003). Serious maternal morbidity showed no difference between the two groups. Subsequent follow-up data on a subset of survivors failed to show long-term differences in death and neurodevelopmental delay between the two groups at 2 years of age.4 However, because of the small number of patients involved, these long term outcomes are not suitable endpoints.5

At least one study published in the wake of the Term Breech Trial is consistent and has shown an association between the increased use of planned caesarean section for breech presentation at term and improvements in perinatal outcome (including halving perinatal mortality and even greater reductions in the incidence of birth trauma).3 This improvement in outcome in part, may be attributed to less experience in the conduct of breech delivery.

The Term Breech Trial has been criticized on methodological grounds4-6 thereby making its generalizability and applicability to appropriately staffed and resourced Australian and New Zealand hospitals uncertain. Accordingly, some expert groups consider that adherence to strict criteria before and during labour, planned vaginal delivery of the singleton breech at term may
C-Obs 11 Management of Breech Presentation at Term (March 2013)

Summary

• Almost 90 per cent of fetuses presenting by the breech at term are now delivered by caesarean section. However, with careful case selection and intrapartum management, it is possible to plan for attempted vaginal delivery in some cases. This will depend upon the experience of the clinical team, and the infrastructure available.

• Any planned breech delivery must take place in an institution that can meet minimum standards of experience and infrastructure. (Recom 6)

• A woman and her partner’s choice for delivery mode should be respected. (Recom 7)

• Where there is strong parental preference for vaginal delivery, the parents should be counseled about the risks and benefits of planned vaginal breech delivery in a particular location and clinical situation. (Recom 10)
Length of time from **RUMPING** to delivery

- In my opinion - the umbilical cord is likely to be obstructed from the moment the buttocks begin to distend the perineum. Although a cord pulsation may be felt - this indicates only the fetal heart rate and not blood flow in the cord. Cord gases taken immediately after delivery do not reflect the babies pH status as this blood has not circulated with the fetus’s blood - once the buttocks present.

- In a letter to the BJOG (June 2005, Vol. 112, p. 845) S. L. Sholapurkar makes the above point. He also makes references from Williams “Textbook of Obstetrics” and from Brian Hibbard’s “Principles of Obstetrics”.

- (Williams “Textbook of Obstetrics” was first in the early 20th century, when vaginal breech delivery was much more common place than now.)
Quote from the Sholapurkar in the BJOG

• “Since ‘assisted breech delivery’ in carefully selected cases became accepted practice from the 1960’s onwards, birth asphyxia rather than fetal trauma has accounted for the vast majority of perinatal deaths. It is reasonable to assume that birth asphyxia may be related to the time taken to complete a breech delivery. This is because cord compression is almost invariable after partial expulsion of the fetus.”...

• “The cord can be compressed at several levels between the fetal body and the pelvic brim, pelvic floor or introitus. Moreover, cord pulsations on the fetal side may represent only a fetal heart beat rather that feto-placental blood flow. It is rarely possible to continue obtaining fetal heart rate trace (CTG) at this stage.
Williams’ “Textbook on Obstetrics”

• “The anterior hip delivers followed by external rotation to sacrum anterior position. The mother should be encouraged to continue to push, as the cord is now drawn well down into the birth canal and is being compressed with resultant fetal bradycardia.”
• Usually with the next contraction the trunk will be born up to the umbilicus. The umbilical cord may be under tension and a loop of cord should be drawn down. From this time onward it must be assumed that there is no further effective placental blood flow. Pulsation of the umbilical cord is not an indication that the cord is not obstructed. Therefore it is important that delivery is progressive and that the infant is delivered within 7 – 8 minutes from this time. An assistant should note the time and inform the obstetrician as each minute passes.
Sholapurkar goes on to add..

- “After 8 – 10 minutes of significant cord compression there is likely to be asphyxial brain injury or death. Because the fetal pH may already be low at the start of breech delivery, a recommendation of 5 minutes may be more appropriate.”
- “The dictum ‘Hands off the breech’ should mean hands off the buttocks, but not minimal intervention even after spontaneous delivery up to the umbilicus.”
- “Although it is important to avoid fetal trauma, it is even more important to avoid fetal asphyxia.”
Technique of Vaginal Breech

Demonstration
- Equipment - neonatal resus, Forceps, Delivery equip.
- Maternal position
- Buttocks presenting
- Once buttocks delivered - rotate to sacrum anterior
- Pull loop of cord through
- Encourage maternal pushing - rather than pulling
- Loveset’s manoeuvre.
- Mauriceau–Smellie–Veit maneuver
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