BREECH VERSIONS and DELIVERIES

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Definition

- Breech Presentation
  - frank (60-65%)
  - incomplete (25-35%)
  - complete (5%)
- Shoulder Presentation (transverse lie)
Incidence

- Breech
  - 3-4% of all deliveries
  - more frequent in preterm
- Transverse lie
  - approximately 0.3%

Factors Associated with Breech Presentations

- Prematurity
- Uterine Anomalies & Tumors
- Polar Placental Implantation

Associated Factors cont..

- Increased Parity
- Fetal Anomalies
- Uterine Overdistention
  - E.g., Polyhydramnios, Multiple Gestation
Maternal-Fetal Implications

- Difficult Delivery
  - e.g., trapped head, spinal cord injury
- Low Birth Weight
  - from prematurity, IUGR or both
- Prolapsed Cord
  - 5 to 20 fold increase

Maternal-Fetal Implications Cont..

- Fetal/Neonatal, or Uterine Anomalies
- Placenta Previa
- Operative Delivery
  - Approximately 90%

Diagnosis

- Abdominal Exam
  - FHR above umbilicus
  - Head in the fundus
  - Breech over symphysis pubis
- Vaginal Exam
- Ultrasound
Management of Breech Presentations

- Antepartum
  - Expectant management
  - Version

- Delivery Decisions
  - ACOG 2001...planned vaginal delivery of a term singleton breech may no longer be appropriate." (Committee Opinion Number 265, December, 2001)
  - ACOG 2006, 2012 (Committee Opinion #340)
    • Cesarean delivery will be the preferred mode of delivery for most physicians because of the diminishing expertise in vaginal breech delivery.
    • Planned vaginal delivery of a term singleton breech fetus may be reasonable under hospital-specific protocol guidelines for both eligibility and labor management.

Breech Vaginal Delivery Criteria

- Frank Breech
- Size > 2000, but < 3500 grams
- Flexed Fetal Head
- Good Labor Progress
- Skilled Provider
- Ability to Perform Emergency C/S
- Neonatal Resuscitation

Delivery Definitions

- Spontaneous Breech Delivery
- Assisted Breech Delivery or Partial Breech Extraction
- Complete Breech Extraction
Emergency Breech Delivery

Legs

- No intervention until after umbilicus passes over perineum.
- Spontaneous delivery of legs, or deliver by flexing knees down.

Trunk

- Hold onto baby
  - Towel around bony pelvis PRN
  - Better grip and prevents legs from flopping
  - Avoid abdomen/pushing on adrenal glands
- Maintain OA position (back up)
- Keep downward pressure
  - Keeps head flexed

Obstetrics: Normal and Problem Pregnancies by Gabbe et al., 1996, Chapter 15
Emergency Breech Delivery
Shoulders & Arms

- Deliver whichever shoulder & arm appears to be coming first
  - Anterior shoulder and arm is delivered by guiding the body downward with gentle traction.
  - Posterior shoulder and arm is delivered by guiding the body upward with gentle traction.
  - Can assist by sweeping the arm out of the vagina
Emergency Breech Delivery
The Head

- After the body is fully born, keep baby rotated to ensure OA
- Keep downward pressure
  - To keep head flexed
  - Helps deliver the back of the head across the symphysis pubis.
Emergency Breech Delivery

Delivery of Head

- Apply suprapubic pressure
  - Encourages head to flex and deliver
- Ease the head out by continuing the upward lift of the body.
  - Avoid hyperextension of neck
- May need to place two fingers between the nose and the mouth to assist in delivery (keeps head flexed).

Fig. 15.32 The lower curve indicates the direction of pressure from two fingers of the operator’s right hand on the fetal oculi. The upper curve shows a horizontal suprapubic flexion of the fetal vertex, as does multifinger suprapubic pressure from an extended hand.

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Emergency Breech Delivery

Important Points

- Delivery is primarily accomplished by maternal pushing rather than traction from below.
- Avoid letting the fetus assume an OP position.
- Until delivery of the face, keep downward pressure on baby to keep the head flexed.
- Do not hyperextend neck when lifting upward to deliver head.
- Can delivery head with fingers between mouth & nose.
- Second person can provide suprapubic pressure.
Intrapartum Nursing Care

- IV, Type & Screen or Hold Clot
- Monitor Labor Progress Closely
- Fetal Monitoring
- Assist with Delivery
  - Suprapubic pressure
  - Assist with forceps

External Breech Version
(External Cephalic Version)

- A method of external abdominal manipulation with which an attempt is made to manually rotate the baby from breech to vertex.

Indications/Prerequisites For Version

- Breech/transverse Lie
- Completed 36 Weeks Gestation
- Unengaged Presenting Part
- Non-irritable Uterus
- Sufficient Amniotic Fluid
- No Macrosomia
- Fetal Back Anterior
- Category I FHR
  - mod variability, no late or variable decels
- Ability to perform an emergency C-section
Contraindications to Version

- Multiple Gestation
- Abruptio, Previa
- ROM
- Nuchal Cord
- Fetal Anomalies
- Previous Uterine Incision?
- Obvious C.P.D.
- Immature L/S or <37 weeks gestation
- Oligohydramnios?
- Labor/engaged presenting part?

Version Pre-procedures

- Ultrasound
- IV Access
- Lab Work
- NST/Biophysical profile
- Tocolysis (Terbutaline)
- Consent

Version Procedure

- Forward Roll
- Backward Flip/Somersault
- Intermittent U/S
  - Can assess FHR & fetal position
- Abandon
  - Significant decelerations
  - Discomfort to the mother
  - Attempt can’t be completed easily
Version Post-procedures
- Repeat Ultrasound
- Fetal Evaluation
- Rhogam (Rh-negative)

Complications/Risks
- Fetal Heart Rate Changes
- Placental Abruption
  - Fetomaternal Hemorrhage
- Preterm Labor
  - If performing on late preterm fetus
- ROM
- Umbilical Cord Prolapse

Nursing Role
- Explanation of Procedures
- Reassurance
- Procedures (NST, tocolysis etc.)
- C/S Set-Up
- Monitor Fetal/Maternal V.S.
- Assistance During Procedure
Success Rate

- Average Success Rate 58%
- Positive Association
  - Increased parity
  - Transverse or oblique lie
  - Terbutaline
- Negative Association
  - Nulliparity
  - Advanced dilation
  - Fetal weight < 2500
  - Anterior placenta
  - Low station
- Conflicting evidence of other predictive factors

Benefit

- Lower Cesarean Delivery Rates

"Because the risk of an adverse event occurring as a result of ECV is small and the cesarean delivery rate is significantly lower among women who have undergone successful version, all women near term with breech presentations should be offered an EVC attempt if there are no contraindications."
- ACOG Practice Bulletin 2016, reaffirmed 2018