

Guidelines for Vaginal Breech Delivery

A. Introduction

The term breech infant presents a challenge for delivery. The publication of the Term Breech Trial showed babies born by planned vaginal delivery had a three-fold higher rate of mortality or serious morbidity than those born by planned elective cesarean section: 4.5% versus 1.5% (1). In 2001, the American College of Obstetricians and Gynecologists issued an opinion that, “Patients with persistent breech presentation at term in a singleton gestation should undergo a planned cesarean delivery.” Since then more publications have modified the original conclusion resulting in ACOG issuing the recommendation “that a planned vaginal delivery of a term singleton breech fetus may be reasonable under hospital specific protocol guidelines for both eligibility and labor management.”

B. Management of the breech fetus at term

1. External cephalic version should be offered to all women at term with a fetus known to be breech. See Protocol #15
2. If unsuccessful, however, or if the patient declines the attempt, the plan for delivery must be carefully thought out. The patient should be counseled as to the relative risks of alternate modes of delivery, and this counseling should be well documented. Women who express a preference for vaginal delivery should be assessed as to suitability and safety.

C. Candidates for vaginal breech delivery at UNM

- Estimated fetal weight 2000-4000 g, normal morphometrics (HC/AC)
- Complete or frank breech presentation
- No prior c-section
- Normal attitude of the fetal head, either military or flexed, but not hyperextended
- Clinically adequate pelvis
- Informed consent
- Presence of at least one physician experienced with vaginal breech delivery.

Women who do not meet these criteria should be advised to undergo cesarean section, and further counseled that the risk of perinatal morbidity is likely to be higher than the figures in the Term Breech Trial.

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D. Management of breech labor

- All candidates for vaginal breech delivery must be cleared by the attending physician on the labor floor and have an attending experienced with breech delivery present during the entire labor and delivery
- The possibility for conversion to cesarean must be kept in mind. This mandates IV access, submission of a specimen to the blood bank, and a pre-anesthesia consultation
- Delay/avoid ROM since this may increase risk of cord prolapse
- Labor may be conducted in the LDR, but delivery should take place in the operating room. Epidural analgesia is optional
- Continuous electronic fetal monitoring or its equivalent is to be employed

E. Induction or augmentation of breech labor

Under certain circumstances, induction of labor may be considered. The physician assuming this responsibility must specifically authorize the induction. Labor augmentation with pitocin may only be employed if inefficient uterine activity is documented, and again must specifically be authorized by the responsible attending physician after thorough assessment.

F. Management of breech delivery

For delivery:

- The patient is brought to the operating room.
 - At least two physicians are required for the delivery, one of whom must be experienced in vaginal breech delivery.
 - An anesthesiologist and a neonatal team should be present in the OR.
 - Nitroglycerin should be available in case uterine relaxation is needed.
 - Piper should be present in the room.
 - Forceps should be available in the room.
 - The attending physician should review maneuvers and plan with the entire team prior to delivery.
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- No intervention should be employed until the buttocks are crowning.
 - The decision to decompose the breech or allow the legs to deliver spontaneously is made by the senior physician attending.
 - Episiotomy is not mandatory; if performed, special care must be taken to protect the fetal genitalia.
 - The arms are released by Lovset's maneuver; the head may be delivered by the Mauriceau-Smellie-Veit maneuver or by Piper forceps.
 - Suprapubic pressure to keep the fetal head flexed is applied by the assistant, who may also be required to maintain the fetal body at the level of the maternal perineum.

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In the case of difficult delivery of either the arms or the head

- Nitroglycerin may be administered by the anesthesiologist. This can be given as a sublingual spray, 1-2 doses of 400 mcg each, or as a bolus of 200-300 mcg intravenously.
- Dührssen incisions, symphysiotomy or Zavanelli maneuver have been used in cases of head entrapment.

G. After delivery

- Following delivery of the placenta, the genital tract, including the cervix, must be inspected for lacerations and repaired as needed.
- Low one-minute Apgar scores are common among breech babies, but the majority have normal five-minute Apgars.
- The decision as to need for neonatal resuscitation is made by the neonatal team in the usual manner.

CONSULTATION: Twenty-four hour consultation is available by calling the Maternal Fetal Medicine service at the University of New Mexico Hospital. 1-888-866-7257.

References

1. Hannah ME, Hannah WJ, Hewson SA, Hodnett ED, Saigal S, Willan AR, for the Term Breech Trial Collaborative Group. Planned cesarean section versus planned vaginal birth for breech presentation at term: a randomized multicentre trial. *Lancet* 2000; 356: 1375-83
2. American College of Obstetricians and Gynecologists. Committee Opinion no. 340. Mode of term singleton breech delivery. July 2006, Washington DC
3. Lockwood CJ, Ardal R. Mode of singleton breech delivery. *Obstet Gynecol* 2002; 99: 1132-3