

## Commentary: Routine Cesarean Section for Breech: The Unmeasured Cost

Andrew Kotaska, MD, FRCSC

Historically, partial breech extraction under maternal sedation was accompanied by high perinatal mortality rates (1). With the safety of modern cesarean section techniques, many deemed the avoidance of this fetal risk worth the maternal risk of cesarean section, and the proportion of breech fetuses delivered by cesarean section steadily increased. This trend reached its peak after publication of the term breech trial in 2000 (2). This trial implied that cesarean section was safer than vaginal birth for all breech fetuses at term. Professional obstetrical associations in the United Kingdom, United States, and Canada issued guidelines mandating cesarean section for term breech presentation. Across much of the world, vaginal breech birth is no longer “offered” to women. A new generation of specialist obstetricians lacks the skill and confidence to attend even the most straightforward vaginal breech birth, and maternal and perinatal deaths have resulted.

The conclusions of the term breech trial were simplistic and erroneous. An overly liberal selection and labor management protocol allowed poorly selected infants to labor without adequate attention to progress. Half of the perinatal deaths in the trial were in growth-restricted fetuses, and infants born after prolonged labor had poorer outcomes compared with those whose labor was shorter (1,3). Inclusion of multiple centers with disparate levels of in-house specialist and surgical capability provided an inconsistent safety net. These factors led to fetal and neonatal harm attributed erroneously to breech presentation rather than to inappropriate management. Use of short-term surrogate outcomes overestimated

the long-term risk of the questionable level of care provided.

Breech birth technique has evolved. Particularly in Europe, centers with consistent specialist backup and cautious protocols convincingly demonstrated that a significant proportion of breech babies can be delivered safely vaginally (4,5). The professional obstetrical associations of the United Kingdom, United States, and Canada have reversed their restrictive stances and are supportive of selected vaginal breech birth (5–7). Given the tenuous efforts to reestablish systems to provide safe breech birth, it is important to recognize the dangers of a system that is unwilling to do so.

### Case 1: Maternal Death from Complications of Cesarean Section for Breech Presentation

In this issue of *Birth*, Dr. Lawson reports a case of a 29-year-old woman in her fourth pregnancy at term, who presented in advanced labor with an average-sized non-footling breech. From the information provided, she would have been an excellent candidate for a vaginal breech birth, but this option was not offered. Instead, an emergency cesarean section was performed despite rapid labor progress and full cervical dilation. The woman experienced an intraoperative surgical complication and subsequent fatal hemorrhage. The coroner’s inquest did not find the decision to perform a cesarean section causally related to the death because “cesarean section for all breeches” was the standard of care. However, it is overwhelmingly likely that without surgical intervention, this woman would have delivered safely with minimal assistance from an obstetrician with even modest experience with breech birth.

### Case 2: Neonatal Death After Unattended Breech Birth at Home

A woman with two previous deliveries, one vaginal and one cesarean section, was found to have a breech presen-

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Andrew Kotaska is Clinical Director Obstetrics in the Department of Obstetrics and Gynecology at Stanton Territorial Hospital, Yellowknife, Northwest Territories, Canada.

Address correspondence to Andrew Kotaska, MD, FRCSC, Stanton Territorial Hospital, Yellowknife, Northwest Territories X1A 2N1, Canada.

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tation at term. She was referred by her midwife to an obstetrician who advised external cephalic version, which was unsuccessful. Cesarean section was advised. The woman refused and was sent by her midwife to another obstetrician for a second opinion, who also recommended cesarean section, which the woman again refused. Despite previous experience with vaginal breech birth, neither obstetrician “offered” a trial of labor in hospital.

The woman returned to her midwife steadfast in her wish to labor. The College of Midwifery guidelines in the province of British Columbia clearly state that breech birth is outside the midwifery scope of practice and advise withdrawal of care rather than attendance in labor. The woman was informed of this policy. She chose to labor unattended at home, where she spontaneously delivered a normally grown baby boy. Shortly after birth, an ambulance was called and paramedics found an apneic newborn on the floor. Initial resuscitation was successful; however, the infant died 24 hours later of multisystem hypoxic organ failure.

A Coroner’s inquiry determined that the midwife had correctly followed her college’s policy by withdrawing care that was outside her scope of practice. No mention was made of the possible causal role of this policy in the death or the failure of either obstetrician to “offer” a trial of labor in hospital. (8)

### Comment

These two cases describe parous women with adequately grown nonfootling breech fetuses at term who were not “offered” a trial of labor. Both women labored spontaneously. With basic obstetrical or midwifery attendance and neonatal resuscitation, it is likely that both would have delivered without complication, and a maternal and a neonatal death would have been avoided. In the twenty-first century, in two of the world’s most developed countries, these women were unable to receive basic obstetrical care for a breech labor.

During the decade since publication of the term breech trial, it has become commonplace in many jurisdictions for specialist obstetricians to advise performance of cesarean section as the only option for breech presentation at term. In a misunderstanding of informed consent, the 2001 American College of Obstetricians and Gynecologists’ breech guideline advised cesarean section for all breeches, suggesting informed consent be obtained only if the woman refused cesarean section (9). For consent to be informed, a woman must *first* be made aware of her options, including the option of doing nothing; and the risks and benefits of each option must be discussed. She should then have the freedom to choose

without prejudice, even if it is not the option recommended by the consultant. This has not been occurring for breech presentation.

Not surprisingly, given the general acceptance of the term breech trial over the last decade, most women have chosen cesarean section; yet some have not. Even in hospitals with consultants skilled in vaginal breech birth, many of these women have been coerced into accepting a cesarean section by not being “offered” the opportunity to labor. Those strong enough to resist have sought care outside the hospital because they were abandoned by an obstetrical system that was unwilling to accept their choice. With no other alternative, midwives committed to their clients’ autonomy have attended breech births at home.

Midwives in New Zealand and England—countries with a long history of empowered, autonomous midwifery—have been supported in this endeavor. Recognizing that threatening to abandon care to coerce a woman to have a cesarean section is unethical and has significant potential to do harm, the Royal College of Midwives advises: “If a woman rejects your advice ... you must continue to give the best care you possibly can, seeking support from other members of the health care team as necessary” (10).

On the other hand, the College of Midwifery of the province of British Columbia takes a much less supportive stance:

If ... the client refuses to follow the recommendations ... the midwife shall ... inform the client that she will be unable to continue to provide midwifery ... make a reasonable attempt to assist the client to find another caregiver ... and follow-up immediately with a hand delivered or registered letter... confirming termination of care” (11).

In Case 2, the midwives’ adherence to this policy likely played a role in the neonatal death.

Few would dispute that a breech labor in a supportive hospital environment is safer than at home, but these women have not had access to a supportive hospital environment. Instead, midwives have cautiously attended breech labor at home. By maintaining trust, women generally accept the midwife’s recommendation to transfer to hospital if labor is not progressing well or the fetal heart rate is abnormal. Anecdotally, this approach is reasonably safe; but it is clearly not optimal. Vaginal breech birth is uncommon, and its management can be complex and technically demanding; it appropriately belongs in the skill set of obstetricians.

Over the past few years, the term breech trial’s limitations have been elucidated and a safe protocol for the selection and management of vaginal breech birth has been published – the PREMODA study (4). With 8,000 participants (eight times the size of the low-perinatal

mortality arm of the term breech trial), PREMODA showed no difference in perinatal mortality or short-term outcome between a trial of labor and elective cesarean section. On a large scale, routine management of breech labor by average, well-supported maternity units has been shown to be safe. Clearly today, both ethically and medicolegally, the option of a trial of labor must be discussed. As more women find breech birth an acceptable option, how will the obstetrical community respond?

Case 1 represents the unmeasured maternal cost of the term breech trial. A new generation of obstetricians lacks the confidence to attend even straightforward breech births. Who can fault a nervous consultant who has never seen a vaginal breech birth when a multiparous woman in advanced labor is rushed to the operating room for a stat cesarean section? For the last decade, cowed by the “standard of care” dictated by the term breech trial, many experienced obstetricians have done the same, knowing in their hearts that it was unjustified.

In the modern era, many women will continue to choose cesarean section for breech presentation. Some suggest that the small proportion who will choose to labor does not justify the effort to reskill the obstetrical workforce in breech birth. Yet 1,800 women in the PREMODA study chose to and safely avoided the risk of cesarean section—a choice the woman in Case 1 was not given. Some would also suggest that the woman in Case 2 is responsible for her infant’s death, yet had her choice been respected, the infant would likely be alive.

Although tragic, these two deaths were understandably part of the obstetrical profession’s learning process. However, over the past decade we have learned much about the physiology of breech birth and what is needed to make it safe—practical information that facilitates both teaching and learning how to conduct a safe breech birth. It is time to invest the time and energy so that competent management of normal breech birth becomes a fundamental obstetrical skill,

as it is in France and Belgium. Not to do so will rob women of their autonomous right to choose, and more preventable deaths will occur.

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