

Editorial: Planning the best mode of breech delivery at term

Krebs L¹,

¹ Department of Obstetrics and Gynecology department, Hvidovre University Hospital, Denmark

Corresponding author: Lone Krebs lone.krebs@regionh.dk

Date of publication: 26.may 2025

DOI: <https://doi.org/10.56182/bjfw29>

A successful vaginal breech delivery is a rewarding experience and to maintain our skills and expertise in classic obstetrics, the management of a vaginal breech delivery is considered one of the most important competencies among obstetricians and midwives.

Vaginal breech delivery has long been known as a high-risk situation in medical history. As cesarean delivery became an increasingly safe alternative to vaginal delivery in the mid-20th century, cesarean breech delivery was suggested as a general approach to avoid perinatal mortality and morbidity.

Fortunately, severe birth complications such as perinatal death, hypoxic encephalopathy, and birth trauma are rare, and far the most of vaginal breech deliveries are uneventful.

Several small hospital audits have shown good results with planned vaginal breech delivery and have advocated for reducing the use of planned cesarean delivery.

In this issue of DJOG, the results from 1,335 breech deliveries at Landspítali in Iceland during the period 1991–2015 are presented. In accordance with numerous previous studies, it was found that planned vaginal breech delivery was associated with more infants having

low five-minute Apgar scores and more infants needing transfer to the NICU compared to planned cesarean breech delivery. As the authors state, the study was not powered to compare rare, severe birth complications such as perinatal death, neonatal hypoxic-ischemic encephalopathy, or intracerebral hemorrhage (1).

However, the study from Iceland adds valuable information for future updates of existing systematic reviews and meta-analyses, which have included observational studies. These studies have documented that intended cesarean breech delivery reduces the risk of perinatal mortality, severe morbidity and in some studies also maternal morbidity when compared to intended vaginal delivery. However, the magnitude of the problem differs widely among the included studies (2,3).

In general, cesarean delivery is associated with increased maternal morbidity. However, considering the breech issue, the rate of emergency cesareans during planned vaginal delivery is very high. Due to this fact, and because emergency cesarean delivery is associated with the highest risk of maternal complications, studies show that planned vaginal delivery increases the risk of maternal morbidity. Severe complications from cesarean delivery,

such as reoperations and organ injuries, are almost exclusively restricted to women with planned vaginal deliveries (4).

Many institutions have proposed specific protocols for the management of planned vaginal breech delivery. Some of these include mandatory assessment by pelvimetry, epidural analgesia, and continuous intrapartum surveillance with cardiotocography, augmented by fetal ECG ST segment analysis. Other concepts focus on birth positions, recommending that the woman is in an upright position in the second stage of labor, with detailed descriptions of maneuvers and time limits for progression. Finally, management by a dedicated breech

birth team of experienced midwives and obstetricians has been proposed. These approaches may all stimulate skill training and enthusiasm, but the fact remains that we do not have scientific evidence to claim that one setup is superior to another.

Balancing the pros and cons of the planned mode of breech delivery could be an obvious subject for developing shared decision-making tools. However, the situation is complex, and such a tool should not only include the individual woman's chances of having a successful, uncomplicated vaginal delivery, her personal values and preferences, but also her wishes regarding the mode of delivery in future pregnancies.

REFERENCES

- 1) Gunnarsdottir S, Jonsdottir AH, Gudjonsdottir MK, Steingrimsdottir T. Neonatal outcomes and trends in mode of delivery for breech presentation. An icelandic retrospective cohort study of 1335 cases in the period 1991-2015. *DJOG*. 2025 May. Doi: 10.56182/qv089694
- 2) Berhan Y, Haileamlak A. The risks of planned vaginal breech delivery versus planned caesarean section for term breech birth: a meta-analysis including observational studies. *BJOG*. 2016 Jan;123(1):49-57. doi: 10.1111/1471-0528.13524. Epub 2015 Jul 29. PMID: 26234485.
- 3) Wängberg Nordborg J, Svanberg T, Strandell A, Carlsson Y. Term breech presentation-Intended cesarean section versus intended vaginal delivery-A systematic review and meta-analysis. *Acta Obstet Gynecol Scand*. 2022 Jun;101(6):564-576. doi: 10.1111/aogs.14333. PMID: 35633052; PMCID: PMC9564601.
- 4) Caning MM, Rasmussen SC, Krebs L. Maternal outcomes of planned mode of delivery for term breech in nulliparous women. *PLoS One*. 2024 Apr 3;19(4):e0297971. doi: 10.1371/journal.pone.0297971. PMID: 38568924; PMCID: PMC10990212.