Almost half of all twin pregnancies will deliver preterm and decisions regarding mode of delivery need to be made in that context. If preterm delivery has not occurred, delivery from 37 weeks of gestation is now recommended.[65] Similar to preterm breech presentation, high-quality evidence is lacking in relation to the management of twin birth and breech presentation. In a systematic review of three cohort studies (1812 women) and one randomised controlled trial (120 women), twins with the first twin presenting as breech were less likely to have a low 5-minute Apgar score if they had a planned caesarean section (OR 0.33, 95% CI 0.17–0.65).[66] A further study[67] compared the outcomes of breech presenting first twins over two time periods, where the caesarean section rate increased from 21% to almost 95%. No significant differences in neonatal morbidity or mortality were reported, but there was an increase in maternal morbidity in association with caesarean delivery. In a retrospective cohort study of 195 term twin pregnancies where the presenting twin was breech, Sentilhes et al.[68] compared the outcomes of the 124 attempts at vaginal delivery (48% vaginal delivery rate) with elective caesarean. There was no difference in the composite primary outcome. Steins Bisschop et al.[69] in a 2012 review concluded that there was no benefit to the near routine practice of caesarean section if the first twin was breech. One common concern is the interlocking of twins. Although Cohen et al.[70] reported an incidence of 1 in 817, this is probably an underestimate.

Evidence level 2+

Given the uncertain risks, the quality of the evidence, the continuing controversy with singletons and the exclusion of a nonvertex twin in the 2013 twin trial,[71] a change to the current practice of planned caesarean section is not recommended.

Evidence level 1+

8.2 *How should a second twin in breech presentation be delivered?*

Routine caesarean section for breech presentation of the second twin is not recommended in either term or preterm deliveries.

B

The second twin is nonvertex at the time of delivery in about 40% of twin pregnancies. One randomised study has been conducted of twin deliveries where the presentation of the second twin was nonvertex.[72] The results showed no difference in 5-minute Apgar scores or in any other indices of neonatal morbidity between the two groups, but the power to detect differences was low as the study only included 60 women with twins. Barrett et al.[71] randomised 1398 women with a twin pregnancy at 32 to 38^{+6} weeks of gestation to planned caesarean section or planned vaginal birth. Outcomes of planned vaginal delivery included 507 women (36% of all planned vaginal births) whose second twin was presenting as nonvertex. This trial concluded there was no difference in the composite primary outcome of mortality or serious morbidity. However, the caesarean section rate was almost 44% among planned vaginal births and a subgroup analysis of the second twins presenting nonvertex was not available.

Evidence level 1+

The observational studies report conflicting results. Ginsberg and Levine[73] reported that with second twin deliveries, low Apgar scores were less frequent when delivery was by caesarean section. A population-based cohort study[74] of twin deliveries in the USA, using birth certificates and reporting on infants weighing 1500–4000 g, found a significantly higher frequency of neonatal death, injury and perinatal morbidity when both twins of a vertex/nonvertex presentation were delivered vaginally than when both twins were delivered by caesarean section.

Evidence level 2–

In contrast, a study in France of 614 twins showed no significant morbidity differences and concluded that the type of presentation should not influence the choice of mode of delivery.[75] In a retrospective cohort study[76] of 1038 twins in the UK, neonatal morbidity after vaginal delivery was similar for nonvertex-presenting and vertex second twins, particularly at lower gestational ages.

Evidence level 2–

The presentation of the second twin at delivery is not always predictable. The chance of cephalic delivery may be improved by routinely guiding the head of the second twin towards the pelvis during and immediately after delivery of the first twin. On the other hand, some attendants prefer to routinely expedite delivery of the second twin by internal version and breech extraction irrespective of the presentation. There is no evidence as to which is safest.

9. What organisational and governance arrangements should be in place to support a routine vaginal breech delivery service?

Simulation equipment should be used to rehearse the skills that are needed during vaginal breech birth by all doctors and midwives. ✓

Guidance for the case selection and management of vaginal breech birth should be developed in each department by the healthcare professionals who supervise such births. Adherence to the guidelines is recommended to reduce the risk of intrapartum complications. C

Departments should consider developing a checklist to ensure comprehensive counselling of the woman regarding planned mode of delivery for babies presenting by the breech. ✓

The evidence discussed on vaginal breech birth supports the adherence to a strict management protocol[14,34,43] and the presence of skilled birth attendants.[14]

Evidence level 3

10. Recommendations for future research

- Evaluation of all-fours position for vaginal breech birth.
- Evaluation of the role of pelvimetry in planning of vaginal breech delivery.
- Evaluation of the effect of epidural analgesia on vaginal breech birth.

11. Auditable topics

- Documentation of discussion regarding mode of delivery (100%).
- Vaginal delivery rates in women planning vaginal breech delivery.
- Rate of adverse neonatal and maternal outcomes following planned and actual breech birth.
- Percentage of staff who have undergone training in vaginal breech delivery (100%).

12. Useful links and support groups

- NHS Choices. *Baby positions in the womb.* [http://www.nhs.uk/conditions/pregnancy-and-baby/pages/breech-birth.aspx].
- Royal College of Midwives. *Vaginal or caesarean delivery? How research has turned breech birth around.* [https://www.rcm.org.uk/learning-and-career/learning-and-research/ebm-articles/vaginal-or-caesarean-delivery-how-research].
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