Neonatal outcomes after vaginal and caesarean breech delivery

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To the Editor: The safety of vaginal breech delivery is still a matter of debate. Definite evidence that caesarean breech delivery improves mortality and morbidity is lacking.[1] The meta-analysis by Cheng and Hannah found a 3- to 4-fold significantly higher perinatal mortality rate (PNMR) and neonatal morbidity with planned vaginal delivery (VD) compared with planned caesarean section (CS).[2] On the other hand, in a Dutch survey where 95% of 247 women with a term singleton breech were allowed to labour, 84% delivered vaginally and had a normal neonatal outcome. The feasibility of VD was determined by normal progress of labour in the first stage with no signs of fetal distress.[3] Another Dutch survey compared the PNMR in breech presentation with that in vertex presentation in singleton pregnancies; it was concluded that breech presentation is not coincidental but a consequence of 'poor fetal quality'.[4]

According to Cunningham *et al*., if hydrocephaly is excluded, the head is flexed, the biparietal diameter is less than 10 cm, a footling breech is ruled out, and the fetus is estimated to be of average weight, a VD can be anticipated.[5]

In developing world settings, and especially in rural conditions, a proper management plan before the onset of labour is often not achievable. The unpopularity of the prospect of a CS prompts women to delay admission to the labour ward until in established labour.

In a series of 181 consecutive breech presentations, 64 (35.4%) had a VD, and 117 (64.6%) a CS. Table I lists the comparative maternal and fetal details. VD patients were older and of higher parity; the birth weights were lighter. The 1-minute Apgar score was significantly lower. The other parameters (5-minute Apgar score, fresh stillbirth rate, early neonatal mortality rate, and PNMR) were similar. The overall PNMR was 83 per 1 000, 2.5 times higher than that in the institution over the last 2 years.

The aim of this survey was not to argue against CS for breech presentations when a VD is deemed unwarranted, either for feto-maternal reasons or lack of skills in breech VD. The purpose was to find out about neonates' outcomes in conditions where planning is often impossible. In view of the high PNMR in both groups, it also supports the suggestion that breech presentation is a consequence of poor fetal quality.

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Table I. Comparative features between vaginal and caesarean breech deliveries

	Vaginal breech *N* = 64 (35.4%)	Caesarean breech *N* = 117 (84.6%)	*t*	*p*
Age (years)	29.8 ± 7.1	27.1 ± 7.0	2.4	0.01
Parity	2.4 ± 2.0	1.3 ± 1.6	4.0	< 0.0001
Birth weight (g)	2 760 ± 748	3 107 ± 503	3.7	0.0003
1-minute Apgar	7.2 ± 2.3	7.9 ± 1.5	2.5	0.016
5-minute Apgar	9.2 ± 2.5	9.6 ± 1.3	1.4	0.16
5-minute Apgar ≤ 7	2 (3.3%)	3 (2.7%)	0.06*	0.80
Fresh stillbirth rate	4 (6.3%)	5 (4.3%)	0.34*	0.56
Early neonatal death	3 (5.0%)	3 (2.7%)	0.57*	0.45
PNMR (/1 000)	109	68	0.91*	0.34

* χ^2.