

BREECH DELIVERY: ABDOMINAL OR VAGINAL?

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Proper management of breech presentation has been a disputed and debated issue for many years. There is still no unanimity of opinion regarding the safest method of delivery of breech presentation. Of late there have been surprising changes in the trends in the management of breech presentation. For a number of years the question of vaginal delivery versus caesarean section for the full term primigravida breech has been debated. There are centres where caesarean section rate is more than 60% for all breech presentations put together. (Linda *et al* 1978). Experienced authors like Donald (1979) discuss about 50% incidence of caesarean section rate for breech presentations in general and stress that they have no cause to regret this policy. He further substantiates his conclusion by observing that in breech delivery the head must pass through the pelvis in not more than ten minutes and such speedy passage of the head, even in a normal vertex delivery, can cause death. On the other hand, there are several reports suggesting that caesarean section is the safest method of delivery of the premature

foetus presenting as breech. Even though it is difficult to accept that abdominal delivery should be used in all premature births, a reduction in neonatal mortality over a long period of study is attributed to an increased rate of caesarean section. All of us are aware that with increasing size of babies presenting by breech there is an increase in mortality and morbidity. So, breech babies found in primigravidae, or premature babies, or babies of more than average size, and others with associated complications are decided more and more for caesarean section. Under these circumstances, it appears worthwhile to have a discussion on the question of vaginal delivery versus caesarean section for breech presentation.

Material and Methods

The study involves 162 breech deliveries that occurred during a total of 6,748 deliveries, an incidence of 2.3%. Only singleton breech presentations were taken up for study. The data was reviewed for age, parity, gestational age, type of breech, type of delivery, Apgar scores, Caesarean indications, dysmaturity, and perinatal deaths.

Observations

The maximum incidence was found in second and third gravidae in the age

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group of 21-25. This is in accordance with the high fertility rate in this age group. Regarding gestational age, 20.9% of babies in this series were preterm. The most common presentation was extended breech. Assisted breech delivery was the most commonly used method. When Apgar scores and type of delivery were compared, it was found that the Apgar scores in both vaginally delivered breech babies and caesarean sections were found to be the same. It is interesting to note, however, that none of the babies delivered by caesarean died, while 13 neo-natal deaths occurred in the vaginally delivered babies. Indications for caesarean section in this series were contracted pelvis, bad obstetric history and cord prolapse as the major causes.

The incidence of small for date babies (below 2500 grams) was 20.3%. When mode of delivery and weight were compared it was found that, the incidence of dysmaturity was nearly the same in both groups, namely 21.5% in abdominal and 20.4% in vaginal deliveries. Within these weight groups however, the mortality rates were more for the vaginally delivered babies. This indicates that caesarean section should be considered even for small for date babies.

It has been observed that with increasing birth weight mortality decreases, but in babies weighing more than 2500 grams the mortality increases. This is due to the increase in amount of trauma to which these infants were subjected. (Table I).

The total number of deaths occurring in the perinatal period was 34. Twenty of these deaths had prematurity as the prime reason. Of the remaining 14, 7 were lost due to the following reasons, 2 died due to cord prolapse, 2 due to dysmaturity, 2 due to congenital defects, and 1 due to intrapartum sepsis. The remain-

TABLE I
Birth Weight and Perinatal Death
N = 34

Birth Weight	Still Birth	Neonatal Death	Perinatal Death
Less than 1000 G.	6	1	100%
1001-1500 G.	5	2	77.7%
1501-2000 G.	2	3	38.4%
2001-2500 G.	3	1	9.5%
2500 & above G.	5	6	14.3%

ing seven deaths may have been avoidable.

The following is the brief resume of these cases.

Case I was a third gravida who came at term, foetal heart sounds were good. Presentation was flexed breech. Membranes ruptured outside. Forceps was applied to the after coming head. Baby was 3.3 Kg. Still-birth.

Case II was a primigravida with a term uterus, good foetal heart sounds, presentation being extended breech. Breech extraction was done and the baby was dead born. Weight 3.2 Kg.

Case III was a third gravida, full term, foetal heart sound good. Presentation flexed breech. Membranes ruptured outside. Craniotomy was done for arrest of after coming head. Weight 3.4 Kg.

Case IV was a second gravida, full term, good foetal heart sounds, presentation flexed breech. Cord prolapse occurred. Still-birth. Weight 3.2 Kg.

Case V was a sixth gravida, term, foetal heart sounds good, presentation extended breech. Assisted breech delivery. Baby died after 48 hours. Weight 3.2 Kg.

Case VI was a primigravida who came at term, foetal heart sounds good, presentation extended breech. Membranes ruptured outside. Weight 2.8 Kg. Baby died 18 hours after birth.

Case VII was a third gravida at term, foetal heart sounds good, presentation flexed breech. Forceps applied to after coming head. Weight 3.3 Kg. It died 4 hours after birth.

Discussion

The decision as to whether a breech presentation should be delivered by caesarean or by vaginal delivery has been a matter of vast debate among obstetricians. The topic may be discussed under two heads.

1. The mature breech.
2. The premature breech.

The following lines may throw a light over this dark problem. In our study, there were 7 avoidable deaths in mature breech babies delivered vaginally. Early caesarean section may have prevented these deaths. If the validity of Apgar scoring is accepted, then undoubtedly vaginal breech deliveries get poor scoring and the hazards of permanent damage have to be taken into account. The Apgar scores in the neonatal deaths in our series was only 2:10. According to Linda *et al* (1978) breeches had a one minute Apgar scores significantly lower than vertex deliveries. Moreover, a significantly large number of primigravida had 5 minute Apgar scores less than 7. It is a well supported view of many obstetricians that a 5 minute Apgar score is well correlated with the quality of foetal outcome. The 1 and 5 minute Apgar scores of breech infants treated by caesarean section are the same as those of vertex presentation delivered vaginally, or by caesarean section. A long prospective study reported in the early 70's showed that the infants of a primigravida breech delivered vaginally had an overall Intelligence Quotient 25 points lower than the vaginal vertex delivery when

tested in elementary school. (Linda *et al* 1979).

Wright (1959) reported a study of breech deliveries where he advocated routine use of caesarean section for all babies weighing more than 2000 grams.

A phrase has been coined, "Breech + any other problem = Caesarean Section".

Thus breech is being increasingly taken as an indication for caesarean section and the ends seem justified.

The Premature Breech

The present trend in many countries is caesarean section for premature babies presenting as breech.

Brenner, *et al* (1974) and Goldenberg and Nelson (1977) have suggested that caesarean section is the safest mode of delivery of a premature foetus presenting as breech although a controlled prospective study has yet to prove this point.

Ingemaresson *et al* (1979) have stated that "Infants in breech position with less than 37 weeks gestation delivered by caesarean section had a neonatal mortality of 4.8% versus 14.6% for vaginal breech deliveries before 37 weeks gestation." The premature infants delivered vaginally had a corrected mortality of 11% and 27% long term morbidity, when compared to caesarean section group with a corrected mortality of 0 and long term morbidity of 4%.

In our study the corrected mortality rate for premature infants was 14.7%. Hence the complacency that sets in the minds of obstetricians when delivering a foetus that is below average and so it can be safely delivered vaginally seems no more valid. But, in a country like ours, due consideration should be given to factors like the availability of premature units, the adequacy of after care given to

the premature infant, and socio-economic status of the parents etc.

Deflexion of the after-coming head

Deflexion of the foetal head is another annoying problem of breech presentation. This has been classified into four grades by Ballas *et al* (1978) according to the degrees of deflexion and extension. Grade IV, that is hyperextension is a definite indication for caesarean section.

Summary and Conclusion

Out of 162 breech deliveries conducted in this teaching institution, 7 avoidable deaths have occurred. These babies could have been saved by early caesarean section. Due consideration should also be given to factors like difficulty in accurate assessment of foeto-pelvic disproportion, in-coordinate uterine action, etc. In many countries now there is a tendency to avoid vaginal breech delivery and to resort to elective caesarean section

in all cases of breech presentation. Thus the time has come when breech presentation is being increasingly taken as an indication for caesarean section. This is particularly so in primigravidae and premature infants.

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