

PERINATAL OUTCOME IN BREECH DELIVERIES

RESHMA DHILLON • KUMUD M. INGLE • J. K. DHURANDHAR
M.J. JASSAWALA • M.V. PATWARDHAN

SUMMARY

A total of 10,829 deliveries were studied, of which 305 were breech, giving an incidence of 2.82%. The overall perinatal mortality rate was 45.15 per 1000 whereas for breech deliveries it was 285 per 1000. Preterm breeches which were 45.9% of the total were responsible for 65.5% of the deaths. Congenital anomalies were found in 5.2% of the cases.

Infants weighing between 2 to 3.5 kg had a similar outcome irrespective of the mode of delivery. Babies less than 2 kg or greater than 3.5 kg had much better outcomes when delivered by caesarean section.

Introduction

Perinatal mortality in breech deliveries is five times higher than that associated with vertex deliveries. This is due to a higher incidence of prematurity, cerebral anoxia, birth trauma, intrauterine fetal deaths and congenital malformations.

This paper describes the incidence and causes of perinatal deaths and its correlation with parity, maturity and mode of delivery. The importance of ultrasonography in the management of breech has been studied.

Materials and methods

A total of 10,829 deliveries were studied. The incidence of breech was studied. An ultrasound was done in most cases to

Nowrosjee Wadia Maternity Hospital, Parel, Bombay 400 012.

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look for any etiological factor for breech, to determine maturity and to rule out congenital anomalies.

A decision for trial of vaginal delivery was made based on the following criteria - estimated baby weight less than 3.5 kg, adequate pelvis, frank or complete breech, non-extended head, fetal head of average sonographic diameter, intact membranes, normal labour progress and no fetal distress.

The perinatal outcome was studied and its correlation with baby weight, maturity and mode of delivery was made.

Results

Of the total number of 10,829 deliveries, 305 were breech giving an incidence of 2.8% (Table I)

TABLE I
PARITY DISTRIBUTION

Author	Primipara	Multipara
Collea et al (1978)	2.9%	2.1%
Green (1982)	3.9%	2.4%
Present series (1988)	1.51%	1.2%
Perinatal mortality rate (PMR)	29.48%	25.5%

1.51% were primiparas with breech. The perinatal mortality in primiparas was only slightly higher than that in multiparas. (Table II)

TABLE II
PERINATAL MORTALITY — ETIOLOGIC DISTRIBUTION

	Per cent	
Total perinatal mortality	87	28.5
Macerated still births	25	
Lethal congenital malformation	11	
Corrected PMR		16.8
Prematurity		65.5
Injury		3.4
Congenital malformation		12.5
Asphyxia		18.6

The corrected PMR was 186 per 1000. Prematurity and birth asphyxia accounted for the maximum number of deaths. (Table III)

TABLE III
CONGENITAL MALFORMATIONS — INCIDENCE AND PERINATAL MORTALITY

	Number	Per cent
Incidence	16	5.2
Perinatal mortality	11	68.5
Hydrocephalus	4	
Meningocele	3	
Anencephaly	2	
Renal anomaly	2	

The mortality rate amongst those babies with congenital anomalies was as high as 68.5% (Fig. 1)

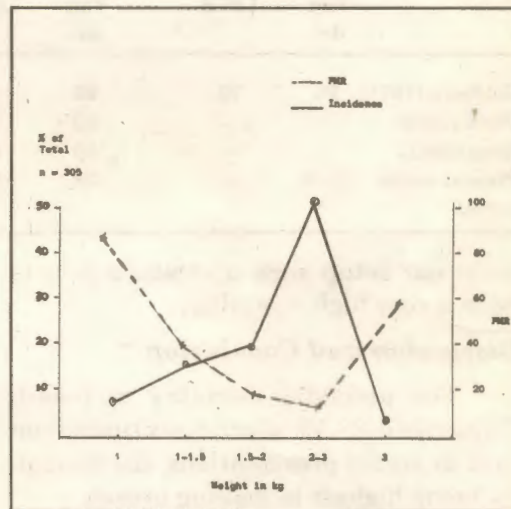


Fig 1. Weight distribution and Perinatal Outcome

The maximum number of breech babies weighed between 2 to 3 kg. The highest mortality was in those with weight less than 1.5 kg. Even when the weight was more than 3 kg the mortality was higher in vaginal breech deliveries. (Table V)

TABLE V
MODE OF DELIVERY AND PERINATAL OUTCOME

	Associated Breech delivery	LSCS	Operative vaginal delivery	Breech extraction
% of total	64.9	25.9	4.2	5.2
PMR (%)	27.4	6.3	7.6	12.5

The lowest mortality rate was following caesarean section delivery of breech babies. (Table VI)

In our series LSCS was rarely done for expected baby weight less than 1.5 kg

TABLE VI
COMPARATIVE STATISTICS — ROUTE AND OUTCOME (% MORTALITY)

Author	1 kg		1-1.5 kg		1.5-2 kg		2 kg	
	Vag. del.	LSCS	Vag. del.	LSCS	Vag. del.	LSCS	Vag. del.	LSCS
Goldberg (1971)	96	72	55	42	7	13	3	6
Wood (1979)	—	—	62	25	20	33	4	0
Karp (1981)	—	—	50	60	18	0	0	0
Present series (1988)	84.8	—	78	60	36	22	25	14.8

as in our setup such premature infants have a very high mortality.

Discussion and Conclusion

The perinatal mortality in breech deliveries is 28.5% which is six times than that in vertex presentations, the mortality being highest in footling breech.

Parity does not play a major role in deciding the outcome, hence the same yardstick of management can be used for both primiparas and multiparas.

Ultrasonography is being increasingly used not only for estimation of gestational age and expected baby weight but also to look for extended head, and associated uterine anomalies. Congenital anomalies were found in 3.9% of the cases. Placenta previa was present in 1.3% of the cases.

Prematurity is one of the major causes of perinatal mortality in breech and accounts for as much as 65.5% of deaths of breech babies. Prematurity and its complications, asphyxia and intracranial haemorrhage were the major causes of this.

In infants weighing less than 2 kg and greater than 3.5 kg, those delivered by caesarean section have the lowest mortal-

ity, hence this should be the method of choice for their delivery. As the overall perinatal mortality is very high in infants less than 1.5 kg, caesarean section should be done in these babies only in centres with very good neonatal care facilities.

In infants weighing between 2 to 3.5 kg the perinatal outcome is similar, whether they are delivered vaginally or by caesarean section. However, one has to consider the maternal morbidity and mortality which is much higher following a caesarean section. Hence the routine performance of caesarean section for every breech presentation is totally unjustified.

Acknowledgements

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