MANAGEMENT OF BREECH PRESENTATION : A REVIEW

UMA RANI ● S. BATRA ● S. NAIR

SUMMARY

The management of 181 breech presentation at Lok Nayak Jayaprakash Narayan Hospital, New Delhi in the year 1991 were analysed. The neonatal outcome with respect to gestational age was compared with the vertex deliveries of the same year. The incidence of breech, caesarean section rates and perinatal mortality was compared with the year 1978.

The incidence of breech was 3.32% of all presentations in 1991 while in 1978 it was 3%. The incidence of caesarean sections in breech has risen to 33.15% presently as compared to 23.6% in 1978. The majority of caesareans (63.3%) are being performed on primigravidae.

Perinatal mortality in breech was 3 times higher than the overall perinatal mortality. No perinatal deaths occured among caesarean babies. Prematurity was the major contributor towards perinatal mortality followed by IUGR. Babies of gestation more than 32 weeks and weight more than 1.3 kg had better survival rates. Where weight was more than 2.5 kg, no death occurred irrespective of mode of delivery.

Perinatal mortality has shown no decline in the last decade despite increase in caesarean sections. Prevention and better management of premature and low birth weight babies delivered may be more effective in this aspect rather than altering the mode of delivery.

INTRODUCTION

In modern obstetrics where every pregnancy is precious, breech presentation assumes special importance. Proper management of breech presentation continues to be a source of much concern and requires considerable skill from the obstetrician. In an effort to reduce perinatal morbidity and mortality, increased caesarean section is being resorted to, particularly in primigravidae. In the present study present management of breech presentation was evaluated.

Dept. of Obst. & Gyn. Maulana Azad Medical College and LNJPN Hospital, New Delhi.

Accepted for Publication on 20.10.1993.

MATERIAL AND METHOD

The retrospective study was conducted at the LNJPN Hospital, New Delhi during the period January 1991 to December 1991. In this period there were 5453 deliveries, of which 181 were breech deliveries. These 181 patients were studied for their age, parity, gestational age, type of breech, mode of delivery, foetal weight, maturity and perinatal outcome. The neonatal outcome with respect to gestational age was compared with vertex deliveries of the year 1991. A comparison of the incidence, caesarean section rate and perinatal mortality was made with prevalent rates more than a decade ago (year 1978).

OBSERVATIONS

The incidence of breech presentation was 3.32% in the year 1991. The age and parity distribution of the study group is shown in Table I.

Booked patients accounted for 56.9% (103) cases analysed while unbooked patients were 43.1% (78).

Extended breech presentation was the most common type of breech and was seen in 90 (49.72%) cases; flexed breech in 48 (26.5%) and footling in 43 (23.76%) patients.

The incidence of prematurity was 16.02% (29 cases) in breech as compared to 5.2% in vertex presentation in 1991.

Breech delivery took place vaginaly in 66.85% (Table II). Sixtyfour booked and 57 unbooked cases delivered by this route. All except breech in labour (28) were allowed vaginal delivery. Only one baby delivered by caesarean section was preterm (34-36 weeks gestation).

The total number of caesarean sections done in our series were 60; the caesarean section rate thus being 33.15%. Amongst them, 39 were in booked cases while 21 were in unbooked. Primigravidae had a higher caesarean section rate of 43.2% and 63.3% of caesareans done were on primigravidae.

The indications for caesarean section are depicted in Table III.

PERINATAL MORTALITY

The total number of stillbirths and neonatal deaths seen were 24, 8 occurring in

Table I

Age and Parity

Age in years	Gravida 1	2	3	4	> 4	Total	%
< 20	24	7	2	—	—	33	18.33
21 - 25	50	26	16	6	—	98	54.14
26 - 30	14	11	5	8	1	39	21.55
31 - 35	—	—	3	3	4	10	5.52
> 35	—	—	—	—	1	1	0.55
Total	88 (48.6%)	44 (24.31%)	26 (14.36%)	17 (9.39%)	6 (3.31%)	181 (100%)	

booked and 16 among unbooked patients. Three babies died due to multiple congenital anamolies. The uncorrected perinatal mortality in this series was 13.26%. This was 3 times higher than the overall perinata mortality (4.19%). All the perinatal death occurred in low birth weight groups There were 91 low birth weight babies, o

Table II

Mode of Delivery

Mode of Delivery	Primigravida		Multigravid		Total	
	No.	%	No.	%	No.	%
Vaginal delivery	50	56.8	71	76.3	121	66.85
Caesarean section	38	43.2	22	23.7	60	33.15
Total	88		93		181	

Table III

Indications of Caesarean Section in primigravida versus multigravidae

In Primigravidae		
1.	Breech with good size baby	- 6
2.	Breech with PIH	- 6
3.	Breech with postdated pregnancy	- 5 (1 with borderline pelvis)
4.	With extended head	- 3
5.	Contracted pelvis	- 4
6.	With IUGR	- 6 (1 withcord prolapse
7.	Previous myomectomy	- 1
8.	With uterine malformation	- 2 (1 with incomplete septum and 1 with unicornuate uteru
9.	With breech	- 5
In Multigravidae		
1.	Breech with previous LSCS	- 7
2.	Previous LSCS with PIH	- 3 (1 with contracted pelvis)
3.	BOH with PIH	- 4
4.	good size baby	- 4 (1 with previous stillbirth)
5.	Cord prolapse	- 3 (with footling)
6.	Bicornuate uterus (previous stillbith)	- 1

Table IV

Mode of Delivery and Birth Weight

irth Weight	Vaginal delivery	Caesarean section	Total
1 kg	2	—	2
0 - 1.5 kg	13	—	13
5 - 2.0 kg	33	2	35
0 - 2.5 kg	30	11	41
5 - 3.0 kg	35	37	72
3 kg	8	10	18
otal	121	60	181

he mean birth weight for vaginal delivery - 2.19 kg
caesarean section - 2.71 kg.

Table V

Gestational Age and Neonatal Mortality

estational age in weeks	Mortality in year 1991	
	Vertex	Breech
28	100%	- (all SB)
8 - 32	76.19%	- (all SB)
2 - 36	22.98%	54.5%
37	0.93%	3.29% (including congenital malformations)

hich 29 were preterm while 62 were term JGR. Of the preterm births, 19 were erinatal deaths, which included 7 stillbirths nd 12 neonatal deaths (2 with congenital alformations). Only one preterm baby d an abdominal delivery which survived e neonatal period. All preterm babies who rvived were of gestational age more than weeks and weight more than 1.3 kg. nong term babies, there were 5 perinatal deaths (one due to congenital malformation) and all these were among LBW babies. Thirteen IUGR babies were delivered by caesarean section while 49 had vaginal delivery. All the 5 deaths were in the vaginal delivery group. No perinatal death was seen among caesarean babies.

Prematurity (80.95%) was thus the most important contributor towards mortality in breech presentation. The corrected peri-

natal mortality (i.e. : excluding congenital malformations) in preterm breech was 62.9% (17/27) while in term babies it was 2.64% (4/151). IUGR contributed to 19.05% deaths. In the birth weight group more than 2.5 kg, no perinatal deaths occurred irrespective of mode of delivery.

For the year 1991 early neonatal (1st week) mortality for vertex presentation was 2.64% while for breech it was 9.7%. Thus early neonatal mortality was almost 3.5 times more in breech.

Gestational maturity less than 32 weeks was associated with poor survival rates. Between 32-26 weeks, mortality among breech deliveries was twice that of vertex deliveries. Even among term babies, this difference was evident. Therefore with comparable gestational ages, mortality is higher in breech deliveries as compared to vertex.

The figures of more than 1 decade ago, randomly of the year 1978 was taken and compared with the year 1991 for breech incidence, caesarean rate and perinatal mortality. In 1978, incidence of breech was 3%, LSCS rate was 23.6% (for breech) and corrected perinatal mortality was 11.5%.

DISCUSSION

The present management of breech presentation favours caesarean section especially in primigravidae (43.2%). Breech presentation with one or more complications are also being offered abdominal delivery liberally. As compared to a caesarean rate of 23.6% in 1978, in 1991 this rate rose to 33.15%. Motwani et al (1989) analysed a similar caesarean incidence of 32%. Bhide et al (1990) reported a higher LSCS rate (33.02%) in primigravidae as compared to 15.89% in multigravidae.

Where estimated baby weight was less, in absence of other complicating factors and an adequate pelvis, vaginal breech deliveries are being allowed in LNJPN Hospital. In this group 49 term IUGR babies delivered vaginally while 13 had abdominal delivery.

Prematurity in breech (16.02%) was 3 times higher than in vertex presentation (5.2%). In our study the trend in cases of preterm labour was for vaginal delivery. Prematurity was found to be the single most important cause of low birth weight and foetal loss.

Bodmer et al (1986) conducted a study on management of preterm breech. While they observed an increase in caesarean section rate from 8% (1964-1971) to 89% (1978-1984), they reported no relative improvement in mortality as compared to vertex presentation. Further though the incidence of depression at birth in breech was twice that in cephalic births, caesarean section did not decrease the relative risk. Moreover GA used was associated with higher rates of depression as compared to epidural anaesthesia while the latter had depression similar to vaginally delivered babies. They therefore did not advocate routine LSCS between 29-36 weeks gestation. Kauppila et al (1981) advocated vaginal delivery from 32 weeks gestation onwards were estimated weight is more than 1.5 kg. Where gestation is below 32 weeks and birth weight below 1.5 kg, the risk of cerebral haemorrhage is much higher as compared to vertex deliveries and this group of patients may benefit most by LSCS. Primary LSCS advocated in these cases is however offset by high incidence of RDS. With the available nursery facilities in LNJPN Hospital neonatal mortality is high in gestation period below 32 weeks and birth weight less than 1.5 kg even in vertex presentations, therefore caesarean section in this group of patients to salvage the baby irrespective of presentation appears futile at present.

Perinatal mortality in breech was

imes higher than the overall perinatal mor-ality. No perinatal deaths were seen mong caesarean babies. Increasing gesta-ional age and birth weight was associated vith lower perinatal mortality. In the past lecade, the perinatal mortality i.e. excluding congenital malformations, in breech has not reduced (11.5% in 1978 compared to 11.8% n 1991) despite the increase in caesarean section rate. Where the birth weight is more than 2.5 kg the outcome of both vaginal breech vaginal delivery per se is not affecting perinatal mortality provided here is no obstetrical contraindications for vaginal delivery. Any decrease in perinatal mortality can be contemplated by better management of premature and low birth weight babies. Offering caesarean sections to this group is not the solution as survival rates even among vertex deliveries of preterm babies is poor. Caesarean sections must be offered judiciously. Breech presentation alone should not be an indication for abdominal delivery.

REFERENCES

1. *Bhide A. G., Chawathe S. K., Saraogi R. M., Shah S. H. : J. Obstet. Gynec. India : 40, 526, 1990.*
2. *Bodmer B., Benjamin A., McLean F. H., Usher R. H. : Am. J. Obstet. Gynec. : 154, 244, 1986.*
3. *Kauppila O., Gronroos M., Aro P., Aittoniemi P., Kuoppala M. : Obstet. Gynec. : 57, 289, 1981.*
4. *Motwani M. N., Nitwe M. T., Ingle K. M. : J. Obstet. Gynec. India : 39, 338, 1989.*