

## STUDY OF BREECH - OUTCOME IN RELATION TO PARITY AND MODE OF DELIVERY

K.C.DE ● J.MUKHERJEE ● BIMAN C.ROY ● PROVAS DAS

### SUMMARY

This is a study of breech presentations during the years 1980-81 and 1987-88. Mode of delivery was analysed in relation to parity. The overall incidence of caesarean section in primigravida and multigravidas during the period 1980-81 was 38.5% and 21.4% and in 1987-88 was 38.3% and 23.1% respectively. The perinatal mortality for vaginal breech delivery in the multigravida was significantly higher.

### INTRODUCTION

Caesarean section for breech presentation is being increasingly used to improve the perinatal outcome. To separate primigravida with breech as a group needing caesarean deliveries is fallacious. (Wight & Cruickshank 1990). Although the worldwide figures of perinatal mortalities for vaginal breech deliveries is as bad in the multigravidas as it is in the primigravida - the incidence of Caesarean section was higher in the primigravida in our institution. As a result of taking a lenient view of the outcome of vaginal breech delivery in the multigravida, the foetal mortality was substantially higher.

In the analysis of indications for C.S. in the primigravida - the commonest reason stands out to be breech per se. In the multigravida the commonest indication was post-caesarean sec-

tion pregnancy which even for non-breech cases have a very high repeat section rate. So the caesarean section rate in the multigravida with breech presentation would have been lower still had it not been for the post-caesarean section category.

### MATERIALS AND METHODS

616 cases of breech presentation in 1980-81 and 474 cases in 1987-88 which were admitted to Eden Hospital, Medical College, Calcutta, were studied. The incidence of vaginal delivery versus C.S. in primigravida and multigravida were analysed. The perinatal mortality both corrected and non-corrected were critically analysed in relation to the parity and mode of delivery. Twin pregnancy with breech presentation were excluded from the study.

### OBSERVATION AND ANALYSIS

The total number of deliveries in 1980-81 was

Dept. of Obst. & Gyn. Eden Hospital, Calcutta Medical College, Calcutta.

Accepted for Publication on 28/11/91.

17,163 of which 616 (3.59%) were breech presentation while in 1987-88 out of 16,288 deliveries 474 presented as breech.

Out of 616 cases in 1980-81, 280 (45.4%) occurred in primigravida and 336 (54.6%) occurred in multigravida. The corresponding figures for 1987-88 were 198 (41.7%) in primigravida and 276 (53.3%) in multigravida.

The overall caesarean section rate for Eden Hospital deliveries over the two periods showed a marginal increase from 13.6% in 1980 to 15.6% in 1987. The total number of deliveries having fallen marginally. The incidence of C.S. rate for breech presentation was 29.2% and 29.5% over the two periods under study (Table : I). Thus the C.S. rate for breech presentation has not increased at all. Comparing the primigravida with

multigravida it is seen that the C.S. rate is substantially greater in the first gravida. There has been little change in the attitude towards the primigravida and multigravida over the last 10 years.

TABLE : I

The single greatest killer of breech babies is undoubtedly prematurity and incidence of babies born before 37 weeks is substantially greater in the multigravida. The incidence of prematurity over the two periods is however similar vide Table : II.

TABLE : II

The overall weight distribution of babies presenting as breech is shown in Table : III.

Table - I

## Mode of Delivery in Breech

		1980 - 81	1987 - 88
Primigravida	Vaginal	172 out of 280 = 61.5%	122 out of 198 = 61.7%
	C. S.	108 out of 280 = 38.5%	76 out of 198 = 38.3%
Multigravida	Vaginal	264 out of 336 = 78.6%	212 out of 276 = 76.9%
	C. S.	72 out of 336 = 21.4%	64 out of 276 = 29.5%
Overall C. S rate	in breech	180 out of 616 = 29.2%	140 out of 474 = 29.5%

Table - II

## Weeks of Gestation in Breech presentation

Weeks of gestation	1980 - 81	Multigravida	1987 - 88	Multigravida
	Primigravida		Primigravida	
Less than 37 wks	43 = 30.07%	120 = 35.7%	49 = 24.8%	89 = 32.3%
More than 37 wks	223	188	138	165
Uncertain dates	14	28	11	22

**TABLE : III**

The incidence of C.S. in the 2-3 kg. weight category for primigravida and multigravida were 39.4% and 20% respectively in 1980-81 and 35.2% and 26.5% respectively in 1987-88, thus clearly showing a bias for C.S. in the primigravida. This bias is magnified dramatically in the above 3 Kg. category where the primigravida had a section rate of 75.8% and multigravida a section rate of only 40.4%. Numerically the commonest indication for C.S. in the primigravida was breech per se, whereas in the multigravida the common-

est indication was post C.S. pregnancy vide Table : IV.

**TABLE : IV**

The fresh still birth rate is 2-3 times higher in the multigravida than the primigravida as shown in Table : V.

**TABLE : V**

The overall perinatal mortality of Eden Hospital has not changed over the years and this is also true for the breech presentation. The overall

**Table - III****Overall weight Distribution (In Kg.)**

Birth weight in Kg.	1980 - 81				1987 - 88			
	Primigravida		Multigravida		Primigravida		Multigravida	
	Vaginal	CS	Vaginal	CS	Vaginal	CS	Vaginal	CS
1 - 1.5	12	—	32	—	6	1	14	1
1.5 - 2	28	2	28	2	14	4	50	2
2 - 2.5	72	36	92	6	44	17	59	16
2.5 - 3	54	46	76	36	50	34	66	29
more than 3	6	24	36	24	8	20	23	16

**Table - IV****Indicator for C. S. in breech presentation**

Cases	1980 - 81		1987 - 88	
	Primigravida	Multigravida	Primigravida	Multigravida
	(n = 108)	(n = 72)	(n = 76)	(n = 64)
Breech	36 (33.3%)	6 (8.33%)	33 (43.4%)	17 (26.6%)
Post C. S. preg.	—	36 (50.0%)	—	30 (46.6%)
Others	72 (66.7%)	30 (41.67%)	43 (56.6%)	17 (26.6%)

foetal loss for breech in the primigravida and multigravida stood at 27.2% in 1980-81 and 24.7% in 1987-88 vide Table : VI.

TABLE : VI

Excluding babies less than 1.5 kg birth weight, macerated still births and babies with gross congenital anomalies - the corrected perinatal mortality in breech presentation if shown in Table : VII.

TABLE : VII

In the multigravida vaginal breech delivery has a definitely higher PNM compared with those delivered by C.S. The higher C.S. rate is undoubtedly responsible for better foetal salvage

in the primigravida.

**DISCUSSION**

The liberal rate of CS for breech presentation is a worldwide phenomenon with Indian figures varying from 19-45% (Mehta et al, 1987 and Pavse et al, 1990). Contemporary American figure for incidence of CS for breech was 76%-83% from 1983 to 1987 at Parkland Hospital (Cunningham et al, 1990). The C.S. rate from another series stood at 94% overall with primigravida having 98% and multigravida 88.2%. There was no statistical differences for outcomes when analysed according to parity (Green et al, 1982).

In our series the very high foetal loss in the

Table - V

**Still Births (Fresh still birth only)**

	1980 - 81	1987 - 88
Primigravida	18 out of 280 = 6.4%	18 out of 198 = 9.1%
Multigravida	60 out of 336 = 17.8%	50 out of 276 = 18.1%

Table - VI

**Overall Foetal loss**

		1980 - 81	1987 - 88
Primigravida	Vaginal	37 out of 172 = 21.5%	36 out of 122 = 29.5%
	C. S.	1 out of 108 = 0.9%	5 out of 76 = 6.6%
Multigravida	Vaginal	122 out of 264 = 46.2%	73 out of 212 = 34.4%
	C. S.	8 out of 72 = 11.1%	3 out of 64 = 4.7%
<b>Total</b>		<b>168 out of 616 = 27.2%</b>	<b>177 out of 474 = 24.7%</b>

Table - VII

## Corrected PNM according to delivery method

	1980 - 81	1987 - 88
Primigravida	Vaginal 18 out of 172 = 10.4%	21 out of 122 = 17.2%
	C. S. —	5 out of 76 = 6.5%
Multigravida	Vaginal 66 out of 264 = 25%	60 out of 212 = 28.3%
	C. S. 4 out of 672 = 5.5%	4 out of 64 = 6.25%
Total	88 out of 616 = 14.2%	90 out of 474 = 18.9%

multigravida with breech presentation has been due to far too few sections reflecting a complacent attitude as compared to primigravida. The picture has not changed as is obvious from the figures taken from the beginning and end of the last decade.

The large number of C.S. done in primigravida with the indication breech per se is undoubtedly responsible for the better outcome. On the other hand, the high fresh still birth in the multigravida delivered vaginally, too few CS done for breech per se, as well as post-C.S. pregnancy being the principal contributor to C.S. - all reflect a reluctance to treat the multigravida with breech presentation on equal footing.

### CONCLUSION

A plea is hereby made not to discriminate too much between a multigravida and primigravida

with breech presentation and the multigravida should be evaluated and managed according to the same rigid criteria.

### ACKNOWLEDGEMENT

We are thankful to the Superintendent, Medical College, Calcutta for permitting publication of hospital records.

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