CORRELATION OF NEONATAL OUTCOME WITH MODE OF DELIVERY IN BREECH PRESENTATION

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SUMMARY

A retrospective study of 427 patients with breech presentation was carried out over the period of 2 years. Babies selected were breech babies weighing more than 2 kgs.

The neonatal morbidity was studied in terms of Apgar Scores, injuries to the baby during delivery and neonatal illness/complications during stay in the hospital.

Introduction

Should a scarred uterus be the consequence of a 180° rotation of fetal pole or can a vaginal trial replace the permanent hallmarks of surgery? The ultimate fate of the baby is decided as it makes its way to the outer unknown world. We the obstetricians of today can to a certain extent decide the tomorrow of the baby.

Aim

To study correlation of neonatal outcome with mode of delivery in breech presentation.

Method of Study

A retrospective study of 427 patients who presented at term with breech was

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conducted at Nowrosjee Wadia Maternity Hospital, Bombay, over a period of 2 years (1986-87). Babies selected were breech babies weighing more than 2 kg. The neonatal morbidity was studied in terms of Apgar Scores, injuries to the baby during delivery and any neonatal illness/complications during stay in hospital.

48.9% of the 427 patients were primiparous and 51.05% were multiparous. Of the total, 25% had to bear the brunt of surgery i.e. caesarean section. 70% were assisted breech deliveries, forceps for aftercoming head in breech was applied in 4% of cases and breech extraction was done in only 3 cases. Two out of the 3 breech extractions were done for breech with footling with cord prolapse. One of the breech extractions was done for second of the twin babies with foetal distress. Thus in a high percentage of cases

vaginal trial was given avoiding caesarean section.

TABLE - I

Mode of delivery	No. of cases	Per cent
1. Caesarean section	108	25.29
2. Assisted breech		
delivery	299	70.02
3. Assisted breech		
delivery with forceps		
for aftercoming head	- 17	3.98
4. Breech extraction	3	0.70

Of the total sections performed, 74% were primiparae and 26% were multiparous patients. This points to the trend in primi with breech presentation towards caesarean section.

Of the assisted breech deliveries conducted, 37% were in primis and 63% in multipara patients showing that a vaginal delivery was allowed in the multiparas in higher numbers as the maternal pelvis had stood the test of a previous delivery.

The fate of primi with breech was as follows: 38% were sectioned, 54% were delivered as assisted breech, forceps for aftercoming head was applied in 6.7% and breech extraction was done in 0.95% patients.

The multiparas with breech presentation showed the following trend:

13% were sectioned 85% were assisted breech deliveries. In 1.37% forceps for aftercoming head was applied.

Thus even though primis accounted too 74% of the total patients subjected to caesarean section. An analysis of labour outcome in primiparae revealed that only 38% underwent section and vaginal trial was allowed in 54% of these patients are shown in Table II.

The Apgar scores of the breech babies correlated with the mode of delivery as follows: 7.3% of babies with assisted breech delivery had Apgar scores at 1 minute less than 5 in contrast with nil in section babies; 18.3% of assisted breech deliveries had scores ranging between 5-7 whereas in section babies 0.92% showed the same scores. The higher percentage of babies with low Apgar scores in forceps for aftercoming head does not significantly correlate as the total cases in the study were fewer in number. This was probably due to lack of experience.

Of the 3 breech extractions in the study, 2 had Apgar scores <5 and 1 baby and score ranging between 5-7.

99% of section babies had Apgar >7 whereas around 74% of assisted breech delivery babies delivery babies had >7 scores.

TABLE - II

Mode of delivery	Primiparas	Multiparas
1. Caesarean section	80 (38.27%)	28 (12.84%)
2. Assisted breech delivery	113 (54.06%)	186 (85.32%)
3. Assisted breech delivery with	h	
forceps for aftercoming head	14 (6.69%)	3 (1.37%)
4. Breech extraction	2 (0.95%)	1 (0.46%)

TABLE - III APGAR AT 1 MINUTE

Mode of delivery	<5	5-7	>7
Caesarean section		1 (0.92%)	107 (99.00%)
Assisted breech delivery	22 (7.35%)	55 (18.39%)	224 (74.91%)
Assisted breech delivery with forceps for aftercoming head	3 (17.64%)	1 (5.80%)	13 (76.47%)
Breech extraction	2 (66.6%)	1 (33.30%)	

Therefore there is an element of asphyxia in vaginal delivery for breech babies as the leading pole does not make enough room for the aftercoming, less compressible pole, the head, in some cases.

Injuries during delivery of the baby was the other parameter used to study neonatal morbidity. The different types of injuries noted in babies were as follows: haematoma in neck region which may be due to injury to sternocleidomastoid muscle in 0.7% cases, bruises on the arms and legs in 1% and Erbs palsy due to damage to brachial plexus in 1% of the cases as shown in Table IV.

lems were encountered at discharge.

The neonatal mortality in assisted breech delivery was found to be around 39/1000 live births in comparison to nil in section babies. This shows that the breech baby is likely to benefit from caesarean section but at expense of maternal morbidity. Thus morbidity from trauma and hypoxia can be reduced by the mere liberal use of caesarean section in selected babies.

The neonatal morbidity in assisted breech deliveries was around 27% in contrast to 0.92% cases.

TABLE - IV

Injuries during delivery	Assisted breech delivery	Assisted breech delivery with forceps for aftercoming head	Caesarean section
1. Haematoma	2 (0.70%)	MANA	
2. Fracture of humerus	2 (0.70%)		T ₌
3. Bruises	3 (1.00%)	1 (5.80%)	440
4. Erb's plasy	3 (1.00%)	Calling (-	-
Total	10 (3.34%)	1 (5.80%)	0

The net morbidity in assisted breech delivery was 3.34% and nil in section babies. No other serious neonatal prob-

Conclusion

For us obstetricians the interests of the baby as well as the mother are equally

TABLE - V

Mode of delivery	Neonatal mortality	Neonatal morbidity
Assisted breech delivery	39/1000 live births	27.090%
Caesarean section	_	0.925%

important. In an effort to reduce maternal morbidity one should not jeopardise the long term neonatal outcome.

Overzealous efforts to decrease maternal morbidity may many a times land us in troubled waters and at time land the baby from mother's womb to tomb.

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