

TRENDS IN PERINATAL MORTALITY OF BREECH DELIVERIES AT K.E.M. HOSPITAL

by

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Introduction

Breech deliveries are still significant contributors to our perinatal loss. When breech is coupled with prematurity the picture becomes gloomier. Vigilant watch over cases with breech presentation can reduce the mortality. Analysis of the data of 1975 and 1976, evolved clearer guidelines in the management of breech presentation and definite improvement in the outcome in 1977.

Material and Methods

Three hundred and five singleton breech deliveries over a period of 28 months (January 1975 to April 1977) were analysed. Factors influencing P.N.M. rate such as booked versus emergency admissions, associated prematurity, obstetric problems etc. were taken into account.

Results and Observations

Table I shows the total perinatal mor-

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tality rate. The P.N.M. rate as well as the corrected P.N.M. rate in breech cases is also shown. Rates were calculated as per definition given by W.H.O.

The incidence of caesarean section in breech presentation increased from 8.33% in 1975 to 27.59% in 1977.

Of all the L.S.C.S. in 1975, 6.96% were for breech. The figure rose to 10.7% (24/225) in 1976 and remained same (8/75) till April 1977.

Discussion

The incidence of breech presentation in our study was 2.68%. Retrospective study of year 1975 revealed astonishingly high mortality rate (520).

The possible causes were conservative attitude of doctors and late arrival of patients in labour. Moreover, a number of breech deliveries were conducted by junior staff and mid-wives.

Enforcement of the following principles helped us in reducing P.N.M. in breech deliveries from 520 to 206. The corrected mortality rate dropped from 90.9 to 69 during this period.

(1) Majority of the full term breech cases were admitted in the ward prior to labour.

TABLE I
Perinatal Mortality

Year	Total No. of Deliv.	Perinatal Mortality Rate	Total No. of Breech	Perinatal M. Rate in Breech	Corrected P.N.M. Rate
1975	4823	72.1	132	520	* (12/132) 90.9
1976	5106	60.06	144	330	* (12/144) 83.4
1977	1440	50.00	29	206	* (2/29) 69.0

* \bar{X} = Total number of deaths due to faulty obstetrics
 \bar{Y} = Total number of deliveries.

TABLE II
Effect of Prematurity Coupled With Breech

Year	P.N.M. Rate	P.N.M. Rate in Premature	P.N.M. Rate in Premature Breech	P.N.M. Rate in Mature Breech
1975	72.1	152.01	* (50/62) 806.5	* (18/70) 257.2
1976	60.06	118.82	* (36/76) 473.7	* (12/68) 176.5
1977	50.00	100.7	* (4/15) 266.7	* (2/14) 142.9

(Upto April)

* \bar{X} = Total number of deaths.
 \bar{Y} = Total number of deliveries.

TABLE III
Associated Causes

Year	Total Breech Deaths	Types	Prematurity	Con-gen. Anomal.	Cord. Prol.	Birth Trauma	Obst. Comp.	Med. Comp.	Undetermined
1975	68	(38)FSB*	25	2	2	4	2	1	—
		(10)MSB**	7	—	—	—	3	—	4
		(20)NND***	18	2	—	8	4	2	—
1976	58	(35)FSB	26	1	1	10	3	1	—
		(11)MSB	4	1	—	—	1	—	2
		(12)NND	6	3	2	4	1	1	—
1977 (Upto April)	6	(3) FSB	2	—	—	1	—	—	—
		(1) MSB	1	—	—	—	—	—	1
		(2) NND	1	—	—	1	—	—	—

* FSB = Fresh Still Birth

** MSB = Macerated Still Birth

*** NND = Neonatal Death

TABLE IV
Perinatal Mortality in Booked and Emergency Cases

Year	P. N. Mortality Breech	P. N. M. Premt. Breech		P. N. M. Mature Breech	
		Booked	Emergency	Booked	Emergency
1975	520	(30/38) 789.5	(20/24) 833.3	(14/62) 225.8	(4/8) 500
1976	330	(18/46) 391.3	(18/30) 600	(8/58) 137.9	(4/10) 400
1977 (Upto April)	206	(3/12) 250	(1/3) 833.3	(1/10) 100	(1/4) 250

TABLE V
Incidence of Caesarean Section

Year	Total No. of Breech	Total No. of LSCS for Breech	Premature		Mature	
			No.	% LSCS	No.	% LSCS
1975	132	11 (8.33%)	1	9.09%	10	90.19%
1976	144	24 (16.67%)	2	8.33%	22	91.67%
1977	29	8 (27.59%)	1	12.5%	7	87.5%

TABLE VI
L.S.C.S. for Breech in Primiparas and Multiparas

No.	PRIMI			MULTI			
	Prema- ture	Mature	No. of L.S.C.S.	No.	Prema- ture	Mature	No. of L.S.C.S.
60	40	20	12 (20.00%)	245	113	132	30 (12.24%)

C.S. rate was almost double in primiparas.

(2) The vaginal breech deliveries were managed by the registrar or a senior staff member. Mauriceau-Smellie-Veit/Burns-Marshall methods were commonly employed for the assisted breech deliveries.

(3) The progress of labour was watched vigilantly and only those cases which had good pelvis, previous normal obstetric history, engaged breech, normally dilating cervix and good uterine contractions were allowed vaginal deliveries.

C.S. was resorted to more liberally for other cases.

(4) The babies were looked after at birth and throughout the hospital stay by the Neonatologist.

Mortality in premature breech has decreased from 806.5 to 266.7 whereas the mortality in mature breech has decreased from 257.2 to 142.9. Excellent co-operation of the paediatric department is greatly responsible for this. Although the

mortality is still frightfully high, it shows a continuous drop and a happy decline.

Morbidity after breech deliveries has also focussed considerable attention recently. It has been shown that when breech is coupled with prematurity 21.7% of the babies show retarded or subnormal mental development compared to 11.2% in cases of prematurity with vertex presentation. In Scandinavia⁴ it has been shown that as high as 27.3% of breech deliveries show E.E.G. abnormalities. Significance of the above findings remain undetermined. Cerebral palsy material in Norway shows the incidence of breech from 8.13% which is four times more than the usual incidence. This breech presentation requires vigilant watch and deep consideration.

Summary

Three hundred and five cases of consecutive singleton breech deliveries have been analysed retrospectively for perina-

tal outcome over a period of 28 months. Decline in mortality rates have been observed and commented upon. Caesarean section rate has been found to be increased. Associated factors responsible for the mortality in breech presentation have been also considered.

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