

## AN ANALYSIS OF 1045 CASES OF BREECH

### Deliveries in Government Raja Sir Ramaswamy Mudaliar's Lying-in-Hospital, Madras-13 for the years 1960 to 1963 (Upto 31st October)

by

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A statistical study of breech deliveries during the period from January 1960 to October 1963 was done to determine the foetal mortality and for clarification regarding its management.

#### *Incidence*

During this above mentioned period there were 1045 cases of breech deliveries in 38,581 deliveries, giving an overall incidence of 2.71%. Only 24.2% of these cases of breech deliveries were booked (Table — I).

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TABLE I

Total number of deliveries—38,581

	No. of cases	Percentage
Breech cases	1045	2.71
Booked Breech cases	253	24.2

#### *Age and Parity*

Age by itself has no influence on the incidence of breech presentation, whereas parity was found to favour this malpresentation among these 1045 cases; 256 (24.50%) were in primigravida, 407 cases (38.95%) were between second and fourth gravida and 382 (36.55%) were among the fifth and higher gravida. (Tables II and III).

TABLE II

Age	No. of cases	Percentage
Upto 20 years	189	18.09
21 to 25 years	314	30.05
26 to 30 years	345	33.01
31 to 35 years	134	12.82
36 to 40 years	58	5.55
41 years and above	5	0.48

TABLE III

Parity	No. of cases	Percentage
Primi-gravida	256	24.50
II-IV	407	38.95
V and above	382	36.55

Contrary to the belief that breech presentations give rise to premature labour, majority (84.97%) of these cases were delivered at term, the prematurity rate (by weight) is rather high (Tables IV & V).

TABLE VI

Type of Breech	No. of cases	Percentage
Frank	443	42.39
Complete	247	23.64
Footling	123	11.77
Knee	1	0.10
Unknown	231	22.10

#### Management

Conversion of persistent uncomplicated breech presentation to a cephalic one by external version had

TABLE IV

Duration of pregnancy	Above 40 weeks	40 weeks	38 weeks	36 weeks	34 weeks	32 weeks	30 weeks	28 weeks
No. of cases	4	884	6	55	15	45	28	8
Percentage	0.38	84.59	0.57	5.26	1.44	4.31	2.68	0.76

TABLE V

Number of cases	Below 5 lbs.	Above 5 lbs.
Percentage	311 29.76	734 70.24

#### Type of Breech Presentation

Frank breech was the commonest type of presentation and was encountered in 443 cases (42.39%) of the cases (Table VI); among these 443 of frank breech 301 (67.95%) were in primigravidae, while 142 (32.05%) were among the multigravidae, thereby showing that the breech with extended legs was more common in the primigravida. The complete variety of breech was found in 247 (23.64) cases, footling in 123 cases (11.77%) and knee presentation in one case (0.10%). In 231 cases (22.10%), the type of breech was unknown. About 25% of these cases of unknown types were brought from outside after the delivery of the baby up to the neck.

been done in 100 cases with an incidence of 15% failure. There was no foetal loss among the successfully turned. This procedure was not done as a routine.

Vaginal delivery, either spontaneous or assisted, was the method of choice in conducting the delivery, provided no other complication was present. Among these 1045 cases, 287 (27.46%) delivered spontaneously. Delivery was assisted in 695 (66.51%) cases. Extraction of breech was done in 42 (4.02%) cases. Extraction was attempted only when there was full dilatation of the cervix and sufficient liquor, the main indication being foetal distress. There were 21 caesarean sections (an incidence of 2.01%) of which 4 were elective.

The lower segment caesarean section was performed in 20 cases and in 1 case a classical caesarean was done for a large baby (13 lbs.) in a diabetic mother. (Tables VII and VIII).

TABLE VII

Spontaneous	287	27.46%
Assisted	695	66.51%
Extraction	42	4.02%
Caesarean	21	2.01%
Episiotomy	108	
Forceps for after-coming head	10	
Perforation for after-coming head	7	
Nuchal and Extended arms	14	

TABLE VIII

Indication	Classical caesarean section	Lower segment caesarean
Diabetes mellitus and large baby	1	—
Previous caesarean and extended breech	—	3
Impacted breech at the brim	—	5
Android pelvis	—	2
Constriction ring	—	1
Uterine inertia	—	5
Big baby over 8 lbs.	—	4

In all planned assisted deliveries an episiotomy was done when breech was visible at the vulval outlet in between pains. Episiotomy was done in all cases of primigravidae, anaesthesia was not given as a routine for assisted deliveries. The after-coming head of the breech was delivered by using the Marshall Burns technique and rarely forceps used. Extraction of breech was always done under general anaesthesia.

An oxytocin drip (2½ units of syntocinon in 500 ml. of 5% glucose solution) in certain cases of uterine inertia had aided in safe vaginal deliveries.

#### Foetal Mortality

The risks inherent in breech delivery are well known, and are hardly lessened by mere parity of the patient to be delivered. When all correctable causes, such as antepartum deaths, toxaeemias of pregnancy, prematurity, congenital anomalies incompatible with life etc. are deducted, it is still associated with a high foetal loss (Table IX).

TABLE IX

	No. of cases	P. N. Mortality
Complicated ..	380	131
Uncomplicated ..	665	107
Total .. ..	1045	238

  

Macerated 41 cases	Dead births 119 No. F.H. 18 on admission	Neo-natal deaths 78 cases
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Intracranial haemorrhages and infections were the most important causes for foetal loss in the neonatal period, especially among the premature babies.

*Perinatal Causes of Foetal Death*

	Intranatal	Antenatal	Postnatal	Total
Congenital Anomalies .. .. .	9	6	10	25
Cerebral Haemorrhage .. .	—	4	6	10
Pulmonary disease .. .	—	1	5	6
Infections .. .. .	1	6	15	22
Rupture of vicera .. .	—	—	3	3
Asphyxia .. .. .	10	19	38	67
Multiple causes .. .. .	—	6	16	22
Unknown .. .. .	29	34	20	83
	49	76	113	238

*Congenital Anomalies*

Anencephalus .. .. .	10
Hydrocephalus .. .. .	7
Meningocele .. .. .	3
Achondroplasia .. .. .	4
Imperforate Anus .. .. .	2
Cleft Palate .. .. .	1
Total .. .. .	27

TABLE X

*Antepartum Maternal Complications*

Complications	No.
Preeclamptic Toxaemia .. .. .	83
Hypertension .. .. .	22
Eclampsia .. .. .	12
Multiple Pregnancies .. .. .	167
Hydramnios .. .. .	33
Accidental Haemorrhage .. .. .	27
Placenta Praevia .. .. .	7
A.P.H. (Unclassified) .. .. .	3
Anaemia .. .. .	12
Pyrexia .. .. .	4
Infective Hepatitis .. .. .	1
Heart disease .. .. .	5
Diabetes Mellitus .. .. .	1
Android Pelvis .. .. .	1
Dysentery .. .. .	2
Total .. .. .	380

*Labour*

The average duration of first stage of labour was 18 hours and second stage 2 hours and 40 minutes. In 18% of these cases first stage was

prolonged for more than 24 hours and in 22% the second stage was more than 24 hours. The complications of labour were often in the form of foetal distress, uterine inertia and prolapse of the cord.

TABLE XI

	No. of cases	Peri-natal mortality cases
Foetal Distress	30	12
Uterine Inertia	41	4
Prolapse of cord	29	19

*Maternal Morbidity and Mortality*

The morbidity and mortality were not due to breech deliveries as such, but they were due to associated antepartum complications and so also complications in labour. There were 6 maternal deaths. Two cases were due to congestive heart failure, one case due to severe anaemia and myocardial failure, and two cases were severe atonic postpartum haemorrhage in a multigravida, another one due to intrauterine sepsis.

*Comment*

This study indicates that parity does affect the incidence of breech presentations. The uncorrected foetal loss is 22.78% and it is rather

high. The perinatal mortality was corrected (13.01) by subtracting prematurity, antenatal deaths, congenital malformations and other antepartum complications. A number of factors contributed to the perinatal deaths. The most important was difficulty in the vaginal delivery of the after-coming head and extended hands.

Probably an unrecognized degree of dystocia was present in those cases. The cause of perinatal death may be recognized at autopsy, but in our series, only a small number of babies was autopsied.

Perinatal mortality could be reduced by the use of conservative technique in breech delivery as against active intervention. External cephalic version should be tried after 32 weeks in all cases of persistent breech

presentations in the absence of any other complications. Anaesthesia for assisted breech deliveries might help to reduce the foetal mortality so that the adequate co-operation of the patient may be obtained to help her, especially in the delivery of the after-coming head.

#### References

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