

# BREECH PRESENTATION AND DELIVERY

## A Review of 923 Cases, 1960 and 1961

by

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This report is presented for the purpose of reviewing the statistics on breech presentation and delivery for the two year period, 1st January 1960 to 31st December 1961, in the Government Hospital for Women and Children.

The actual method and technique employed in the management of breech delivery is according to certain principles laid out by the Director of the Institute of Obstetrics and Gynaecology in the year 1958, though there may be certain variations regarding the type of anaesthesia in assisted breech delivery according to individual obstetricians. Before considering the statistics it should be made clear that in a teaching institution like ours the results are due to the hospital as a whole, each member of the staff, from the youngest postgraduate to the senior obstetrician, having contributed his share.

### *The Material*

There were in the period under re-

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*Paper read at the 12th All-India Obstetric and Gynaecological Congress at Ahmedabad in December 1963.*

view 1001 breech presentations among 27,130 deliveries, an incidence of 3.7 per cent. Caesarean sections were done in 38 or 4.1 per cent. These cases are dealt with separately.

An understanding of complicated and uncomplicated breech presentation is important to procure uniformity of statistics with other institutions. By complicated breech is meant the presence of some abnormality additional to that inherent in the breech presentation, such as placenta praevia, accidental haemorrhage, toxaeemias, foetal malformations incompatible with life, prolapse of the cord, and twins. We have taken prematurity (infants weighing less than 2500 g), haemolytic disease of the newborn, maceration of the foetus or death early in labour, to constitute sufficient extra foetal hazards to merit inclusion as other complications. The records of 61 infants are missing, and there were 17 cases admitted with absent foetal heart; hence these 78 cases have been deleted giving a total of 923 cases to account for. There were 381 uncomplicated breech deliveries and 504 complicated ones.

### *The Results*

It is convenient to consider several tables and to draw conclusions from the statistical evidence presented.

The parity of the patient is given in

table 1. The figures show that the number of multiparas was in excess of the number of primiparas. The proportion of primiparas to multiparas was 236 to 687.

TABLE I  
Parity

	No. of cases	Per cent
Primiparas	236	26
Multiparas	687	74

Type of breech is listed in table 2. Extended breech delivery was the most common type and was found in 126 primiparas and 325 multiparas.

TABLE II  
Type of Breech

	Extended	Flexed	Footling	Knee	Unclassified	Total
Primiparas	126	68	36	0	6	236
Multiparas	325	213	112	2	35	687
Total	451	281	148	2	41	923

Table 3 shows the 504 complicated breech presentations and these were deleted to arrive at a corrected foetal mortality.

*Macerated and intrauterine deaths:* There were 48 macerated infants and intra-uterine death occurred among 18 infants.

*Premature infants:* Infants weighing below 2500 g are classified as premature. There were 90 premature infants and 47 deaths occurred in this group, a mortality of 52.2 per cent.

*Twins:* Among 173 twins presenting as breech, there were 56 deaths,

a mortality of 32 per cent.

*Triplets:* In two sets of triplets the foetal mortality was 100 per cent.

*Prolapse of the cord:* There were 44 prolapsed cords with 27 deaths. The incidence of cord prolapse in the entire series was 4.7 per cent.

*Congenital defects:* There were 28 infants and 26 deaths in this group.

*Pre-eclampsia and eclampsia:* There were 48 cases and 24 deaths giving a mortality of 50 per cent.

*Abruptio placentae:* There were 30 infants and 28 deaths.

*Hydramnios:* Of the 8 cases there were 5 deaths.

*Placenta praevia:* Among 8 infants there were 6 deaths.

*Antepartum haemorrhage unclassified:* Among 8 infants there were 4 deaths.

*Miscellaneous:* Both the infants died in this group. There were associated conditions in the mother like cardiac disease and severe anaemia complicating pregnancy.

There remain 381 uncomplicated breech deliveries with 24 infant deaths due to factors intrinsic in breech delivery, giving a corrected foetal mortality of 6.3 per cent.

TABLE III  
Calculations of Corrected Fetal Mortality Rate

Corrections	No. of cases	Still-birth & Neonatal deaths	Total No. cases	Total still-births & Neonatal deaths	Fetal mortality rate per cent
Totals			885	316	35.7
Macerated & intrauterine deaths	66	66			
Remainder			819	250	30.5
Premature infants	90	47			
Remainder			729	203	27.8
Twins	173	56			
Remainder			556	147	26.4
Prolapse of cord	44	27			
Remainder			512	120	23.4
Congenital defects	28	26			
Remainder			484	94	19.4
Pre-eclampsia and eclampsia	48	24			
Remainder			436	70	16
Abruptio	30	28			
Remainder			406	42	10.3
Antepartum haemorrhage unclassified	5	4			
Remainder			401	38	9.4
Placenta praevia	8	6			
Remainder			393	32	8.5
Hydramnios	8	5			
Remainder			385	27	7
Triplets	2	2			
Remainder			383	25	6.5
Miscellaneous	2	1			
			381	24	6.3

#### Method of Delivery

Table 4 shows that in the over-all series spontaneous delivery occurred in 108 (11.7%), assisted breech delivery in 695 (75.4%) and breech extractions in 82 (8.9%). Caesarean section was performed in 38, giving an incidence of 4.1 per cent.

TABLE IV  
Method of Delivery—All Cases

	No. cases	Percent
Spontaneous	108	11.7
Assisted breech delivery	695	75.4
Breech extractions	82	8.9
Caesarean section	38	4.1

There were 381 uncomplicated breech deliveries, 98 were primigravidas and 283 multigravidas. The average weight was 2700 g. Maximum weight was 4300 g. and the minimum weight was taken as 2500 g. The average length of labour was 11 hours 37 minutes for the primiparas, and 8 hours 28 minutes for the multiparas. Table 5 illustrates the mode of delivery in relation to parity and the foetal outcome. In this group of 98 primigravidas, assisted breech delivery occurred in 90 and extractions in 8, with foetal mortality of 6.6 per cent and 37.5 per cent respectively.

TABLE V  
Foetal Mortality—381 Uncomplicated Cases

	Primiparas			Multiparas		
	No. cases	Mortality	Percent	No. cases	Mortality	Percent
Assisted breech delivery	90	6	6.6	254	11	4.3
Breech extractions	8	3	37.5	29	4	13.7
Total	98	9	9.2	283	15	5.3

Of the 283 multigravidas, assisted breech delivery occurred in 254 with foetal mortality 4.3 per cent and breech extractions in 28 with foetal mortality 13.7 per cent. There was a 9.2 per cent foetal mortality for primiparous patients and 5.3 per cent mortality for multiparous patients.

#### Foetal Mortality Due to Breech Delivery

Table 6 summarizes data on the 24 foetal deaths attributable to breech delivery; 7 infants were delivered by breech extraction, 17 by assisted breech delivery. In 2 cases there was diminution in the pelvic cavity, forceps to the after-coming head was applied in 4, and pitocin drip was given in all the 3 primiparas with inertia; the cervix was undilated in 3.

#### Caesarean Section

Caesarean section was performed in 38 cases, 31 of these were primary and 7 repeat caesarean sections, an incidence of 4.1 per cent. Breech was a factor in 24 of the primary caesarean sections or 2.6 per cent and no foetal mortality occurred in this group.

#### Maternal Mortality

There were 4 maternal deaths giving an incidence of .4 per cent. All the maternal deaths occurred in the complicated cases. The cause of death was severe anaemia in one, gastro-enteritis in the second and the third patient had grade III accidental haemorrhage. All the 3 patients died within 48 hours after the delivery. One maternal death occurred among

TABLE VI  
Analysis of 24 Uncomplicated Breech Deaths

Parity .. .. .	9	} Primiparas
	15	
Type of breech .. .. .	14	} Extended
	8	
	2	} Footling
Delivery .. .. .	17	
	7	} Breech extractions
Contracted pelvis .. .. .	2	
Pitocin drip .. .. .	3	
Undilated cervix .. .. .	3	
Forceps .. .. .	4	

TABLE VII  
Corrected Foetal Mortality Rate in Caesarean Section

Caesarean Sections	No. cases	Still-births and neonatal deaths	No. cases
Totals	38	Totals	3
Repeat	7	Premature infants	3
Primary			
Breech not a factor	7		Corrected fetal mortality rate
Breech a factor	24		Nil

the 38 caesarean sections. The indication for caesarean was a previous difficult repair of a vesico-vaginal fistula. She expired 48 hours after the operation.

#### Summary

1. There were 923 breech presentations in 27,130 deliveries during the period January 1960 to December 1961. The over-all foetal mortality was 35.7 per cent and maternal mortality .4 per cent.

2. There were 38 caesarean sections in the series (4.1 per cent) and breech was a primary factor in 24 (2.6 per cent).

3. Among the 381 uncomplicated cases delivered vaginally there was a 9.2 per cent foetal mortality for primiparas and 5.3 per cent for multiparas.

4. In reviewing our records of foetal death which were preventable or had preventable factors, in most instances it may be due to the lack of experience on the part of the operator. In some cases the foetopelvic disproportion was not diagnosed previously. Pitocin drip for hypo-

tonic inertia was resorted to in primiparas thus increasing the foetal hazard in this group. The modern teaching is that a careful search for disproportion should be made and liberal caesarean sections be performed to lower the foetal mortality. The earlier series showed a caesarean section rate of 1.7 per cent and a corrected foetal mortality of 12 per cent. In 1960 and 1961 the caesarean section rate was 4.1 per cent with a corrected foetal mortality of 6.3 per cent.

#### References

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