

# A CLINICAL STUDY OF "BROW-FACE" PRESENTATION

by

RASHNE PANTHAKY,\* M.B.,B.S., D.G.O., M.D. (Obst. & Gynaec.)

and

GOURI PADA DUTTA,\*\* B.Sc., M.B.,B.S., M.O. (Cal.)

## Introduction

Borell and Fernstrom (1960) introduced a new nomenclature—"Brow Face" to a group of cases where it was difficult to pin-point whether the presentation was face or brow. While analysing face and brow presentations the investigators of the present series encountered such difficulties. So these cases were separately analysed to understand the validity of the new terminology.

## Materials

Analysis of face and brow presentations occurring in Chittaranjan Seva Sadan, Calcutta, within the period from January 1966 to December 1975 was done. A total number of 72,763 cases were delivered within this period. Out of this, 167 were delivered as face and 42 were delivered as brow. Of which only 15 could be termed as "Brow-Face" presentation.

## Method of Study

All informations regarding the patients' age, parity, period of gestation, course of labour and mode of delivery were analysed from the hospital's records according to a well worked out proforma. Those cases where the diagnosis wavered from

face to brow by the same examiner or by other examiners as well, were described as "Brow-Face" presentation. An attempt was made to find out if these cases had any special feature regarding their parity, period of gestation, nature of uterine contraction, type of pelvis, mode of delivery and weight of the baby.

## Results

**Incidence:** In Chittaranjan Seva Sadan, a total number of 72,763 cases were delivered between January 1966 to December 1975. Out of these total deliveries, 167 were delivered as face and 42 were delivered as brow.

Out of 167 cases of face, 15 were analysed as "Brow-Face" presentation.

**Parity:** The patients were analysed in relation to their parity. In cases of face, it was seen that incidence of face presentation was commoner amongst multiparae, whereas in brow presentation incidence of primiparae was significant.

When analysed in relation to their parity it was found that in this group, primigravidae consisted of 46.6 per cent, and the remaining were multiparae of which 13.3 per cent belonged to the grand multiparae group (Table I).

**Period of Gestation:** Premature and over-weight babies have been described as one of the causes of face and brow presentation respectively. The period of gestation of these cases was analysed and has been shown in Table II.

\*Research Scholar.

\*\*Associate Professor, Obst. & Gynec.

Chittaranjan Seva Sadan, 37 S. P. Mukherjee Road, Calcutta 700 026.

Accepted for publication on 31-1-81.

TABLE I  
Analysis of 15 Cases of "Brow-Face"  
Presentations in Relation to Their Parity

Parity	No. of cases	Percentage
Primigravida	7	46.6
2nd & 3rd gravida	3	20.0
4th & 5th gravida	3	20.0
Above 5th gravida	2	13.3
Total	15	99.9

TABLE II  
Analysis in Relation to Their Period of Gestation

Period in weeks	No. of cases	Percentage
Below 37 weeks	—	—
38 weeks	3	20.0
39 weeks	—	—
40 weeks	8	53.4
Above 40 weeks	4	26.6
Total	15	100.0

The analysis of the period of gestation shows that 80.0 per cent were at or beyond term. Only 3 cases (20 per cent) were in their 38th week of gestation. This is quite different from that observed in both face and brow presentations.

**Uterine Contraction:** A good uterine contraction usually corrects an unsuitable position. A brow may be converted either to a vertex or to a face presentation. So the nature of uterine contraction in this group of cases was noted.

Good uterine contraction was present in 53.4 per cent of cases. The contraction was either weak or moderate in the remaining 46.4 per cent of cases.

**Pelvis:** The role of pelvis in face and brow presentation has been emphasized by many or has been questioned by some investigators. The role of pelvis, if there be any, in these 15 cases was investigated.

The types of pelvis as determined clinically have been placed in Table III.

TABLE III  
Analysis in Relation to the Pelvis of the Patients

Types of Pelvis	No. of cases	Percentage
Adequate	9	60.0
Flat	4	26.6
Prominent ischial spines	1	6.7
Convergent lateral walls	1	6.7
Total	15	100.0

The above Table shows that the pelvis was adequate and beyond any suspicion in 60.0 per cent of cases. In the remaining 4 cases (26.6 per cent) the sacrum was flat. One case had prominent ischial spines and another had convergent lateral walls.

**Mode of Delivery:** The mode of delivery was also slightly different in this group of cases as will be seen in Table IV.

TABLE IV  
Analysis of 15 Cases of Brow-Face Presentations in Relation to Mode of Delivery

Mode of Delivery	No. of cases	Percentage
Spontaneous	6	40.0
Caesarean section	7	46.6
Conversion	—	—
Forceps	2	13.4
Craniotomy	—	—
Version	—	—
Total	15	100.0

The mode of delivery again reveals interesting features. In this group, 46.6 per cent was delivered by caesarean section. It has been seen before that the incidence of caesarean section was only 16 per cent

in face presentation and 59.5 per cent in brow presentation. Spontaneous delivery was only 40 per cent as compared to 73 per cent in face and 19.2 per cent in brow. Forceps was applied in 13.4 per cent of cases as opposed to 6 per cent in face and 9.6 per cent in brow presentation.

*Weight of the Baby:* Like the period of gestation the weight of the babies after delivery was analysed to note the prevalence of premature and over weight babies in this 15 cases.

Premature and big babies are said to be responsible for face and brow presentations respectively. In this group, none were below 5 lbs. or above 7 lbs. Out of 15 cases, 11 had babies weighing between 5½ lbs. to 7 lbs. and the remaining delivered babies weighing between 5 lbs. to 5½ lbs (Table V).

TABLE V  
*Analysis of the Weight of the Babies*

Weight of Babies	No. of cases	Percentage
Below 5½ lbs.	4	26.6
5½ lbs. to 7 lbs.	11	73.4
Above 7 lbs.	—	—
Total	15	100.0

Analysis of the clinical features of these 15 cases confirms that although they were included as face presentation, should be termed as "Brow-Face".

#### Discussion

On analysing the 167 cases of face presentation belonging to the retrospective study group, the investigators found 15 cases in which the diagnosis wavered from face to brow. These cases were at times labelled as 'incompletely extended face'. Borell and Fernstrom (1960) concluded after roentgenographic study of the mechanism of labour in face and

brow presentation that face presentation commonly develops from a brow or an attitude between a brow and a face. For the latter attitude they have suggested the term "Brow-Face". They consider that this midway presentation between a brow and a face are quite common where a part of both the face and brow presents. In their radiological study of 16 women, pelvimetry and intrapartum X-ray was done. With the exception of 2 cases in which there was a mild degree of flat pelvis, the pelvic dimensions were found to be within normal limit. Out of these 16 cases on radiological examination they found "Brow-Face" presentation in 9 cases and 1 case of brow was converted to "Brow-Face". This particular position they diagnosed either one finger breadth above or one finger breadth below the level of ischial spines, i.e. in the area of mid-pelvis and all of them were delivered as face except one case which subsequently became a brow. Their study is a conclusive proof of the occurrence of secondary face.

These 15 cases in this series were analysed separately to establish whether it was a separate entity or an intermediate position during the conversion of brow presentation to a face presentation. These 15 patients have been delivered and documented as face in this series but the analysis of these cases regarding parity, period of gestation, uterine contraction, type of pelvis, mode of delivery and foetal weight shows certain characteristic features (vide Tables II to V). Primigravidae consisted 46.6 per cent of these cases whereas the incidence of primigravidae in face presentation was 19.1 per cent and in brow 35.7 per cent. Analysing the period of gestation it was noted that 80 per cent cases were at or beyond term. Only 3 cases (20 per cent) were at 38th week of their gestation, whereas

the period of gestation in face presentation showed only 38.2 per cent cases of face and 43 per cent of cases of brow were at or beyond term. The uterine contraction was weak in 20 per cent and moderate in 26.6 per cent of cases. Pelvis was adequate in 60 per cent of these cases. In the remaining 40 per cent cases flat pelvis was noted in 26.1 per cent. Ischial spines were prominent in 1 (6.6%) and lateral wall was convergent in another pelvis. Spontaneous delivery occurred as face in 40 per cent of cases. Out of the total number of caesarean sections in face presentation which was done in 25 cases, 7 were performed on these cases. So the frequency of caesarean section in this group was 46.6 per cent which occupies a middle position between face and brow so far

caesarean section is concerned. This suggests that if the nomenclature of the new presentation is accepted, one should be able to diagnose more such cases and manage them accordingly.

*Summary and Conclusion*

Only 15 cases out 167 face presentations could be diagnosed as "Brow-Face". The intrapartum behaviour of these cases has been analysed and it was found that they require special consideration. Acceptance of this new nomenclature would help the obstetrician to diagnose more such cases and come to a positive conclusion regarding its significance.

*References*

1. Borell, U. and Fernstrom, I.: Acta. Obstet. Gynec. Scand. 39: 626, 1960.