

Face Presentation

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FACE PRESENTATION is an uncommon presentation and due to its rarity, insufficient cases can be collected within any one obstetric period to permit proper critical evaluation of the various problems associated with its diagnosis and management. One has then to depend on cumulative data from various reports.

This paper reviews our experience with 16 cases of face presentation managed at the University Hospital, Kuala Lumpur from January 1968 to December 1975.

RESULTS AND DISCUSSION

1. Incidence

Sixteen cases of face presentation were managed between 1968 and 1975, out of a total of 20,903 hospital deliveries, making an incidence of 1:1306 or 0.08%. Reported incidences vary from 0.09% to 0.55%. Cumulative series indicate a mean incidence of 1:496 to 1:458 or 0.20% to 0.21% respectively (2, 7).

Eight patients were Indians, five were Chinese, two were Malays and one was an Orang Asli.

2. Etiological Factors

As with brow presentation, much emphasis has been placed on the possible etiological factors. These can be divided into maternal, fetal and placental-membrane.

Maternal Factors

i) Parity

The majority of patients were multiparous i.e. 14 patients (87.5%). Six patients (37.5%) were

para 5 and above. Although multiparity and grand-multiparity have been mentioned as factors, they are unlikely to be important predisposing factors.

ii) Contracted Pelvis

There was no case of pelvic contracture resulting in fetopelvic disproportion. Fetopelvic disproportion has been commented to be an important factor in the genesis of face presentation, its incidence varying from as low as 5.0% (1) to as high as 40.0% (4), with most reports from 10.0% to 15.0% (2, 5, 6, 7).

Fetal Factors

i) Fetal size

Two infants weighed less than 2500 g (12.5%) and one weighed over 4000 g (6.3%).

Prematurity (birth weight less than 2500 g) is one of the prominent predisposing factors and a clear cut relationship exists with face presentation. Reported rates vary from 8.0% to 50.0% (1, 2, 5, 6, 7).

Similarly, big babies (over 4000 g) have been claimed to be prominently associated with face presentation, with incidences varying from 10.0% to 15.0% (1, 2, 5, 6, 7).

ii) Fetal abnormality

One fetus was anencephalic (6.3%). Other studies indicate incidences of 2.5% to 11.0% (1, 2, 4, 5, 6). Other abnormalities of the fetus that have been associated with face presentation include tumours of the neck, goitres and hydrocephaly.

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There were no cases of multiple pregnancy in the present series.

Placental-membrane Factors

i) *Premature rupture of membranes*

This occurred in one patient at 29 weeks (6.3%), compared to reported incidences of 5.0% (1) and 22.7% (7). High incidences of premature rupture of membranes have been commented to be probably secondary to poor adaptation of the fetal presentation to the cervix uteri.

ii) *Cord round neck*

This was present in 4 patients (25.0%). A short cord or cord round neck have been claimed to be etiological factors with reported incidences of 2.5% to 19.2% (1, 2, 6, 7).

Unknown etiology

No predisposing factor was found in 6 patients (37.5%). Reported incidences vary from 20.0% to 50.0% (2, 5, 7).

3. Position of Head before Diagnosis of Face

In all patients, a diagnosis of face and brow (in 2 patients) was made at the first vaginal examination. There was therefore no data available on pre-existing occiput-posterior positions and deflexion attitudes.

An initial brow presentation was present in 2 patients (12.5%). Both corrected spontaneously to face, mento-transverse and while one delivered spontaneously, the other had a caesarean section for fetal distress. Initial brow presentation was found in 10.0% of patients (1).

Occiput-posterior positions with deflexion attitudes in labour no doubt play important roles in secondary face and brow presentations.

4. Face Positions

Of the 16 cases, 3 were mento-anterior (18.7%). 9 were mento-transverse (56.3%) and 4 were mento-posterior (25.0%). Of the mento-anterior cases, one delivered spontaneously, one by forceps and one by caesarean section. Spontaneous delivery occurred in 6 of the mento-transverse cases, one was delivered by forceps and 2 by caesarean section. Of the mento-posterior cases, 2 were delivered spontaneously and 2 by caesarean section.

Reports have indicated a higher incidence of mento-anterior positions, from 40.0% to 75.0% (1, 4, 5, 6), although high incidences of mento-posterior positions have also been reported, from 30.0% to 60.0% (4, 7).

Face positions are important factors in management as mento-anterior positions are consistent with natural spontaneous deliveries (2, 3, 6), while mento-posterior and mento-transverse positions are not so favourable and tend to be associated with higher rates of operative interference (2, 3, 6). Nevertheless, spontaneous rotation to mento-anterior positions can occur in 45.0% to 65.0% of mento-posterior positions (5).

5. Time of Diagnosis

Primary face presentation was diagnosed in one patient (6.3%) in the antenatal period. Even in this patient, X'ray was not taken for suspicion of face presentation but for suspicion of hydrocephalus.

Diagnosis of face presentation was made in early first stage labour (os less than 6 cm.) in 5 patients (31.2%), in late first stage labour (os more than 6 cm.) in 7 patients (43.7%), and only in second stage or at caesarean section delivery in 3 patients (18.8%).

It has been commented that in a large percentage of cases (over 50.0%), the diagnosis is not made until delivery is imminent (1, 5, 6, 7). Although there is this lack of accuracy in early detection, nevertheless most patients proceed in labour without incident and are delivered spontaneously or by low forceps.

6. Labour

i) *Incoordinate labour*

This occurred in 3 patients (18.8%). One patient had a brow presentation which spontaneously corrected to face presentation and delivered a live birth weighing 3030 g after a labour of 21 hours 45 minutes. The second patient laboured for 28 hours 10 minutes before she delivered spontaneously a live birth of 4080 g. The third patient was delivered of a live birth of 3330 g by manual rotation and forceps delivery under general anaesthesia after labouring for 24 hours 50 minutes.

ii) *Obstructed labour*

This was observed in one patient (6.3%) where a face, mento-posterior progressed to a brow posterior. At os 6 cm., the brow was still unengaged and a caesarean section was done for a 3830 g baby.

iii) *Duration of labour*

Of the 11 patients who delivered vaginally, labour was less than 12 hours in 8 patients (72.7%), between 18–24 hours in one patient (9.1%), and more than 24 hours in 2 patients (18.2%).

The mean duration of labour was 11 hours 20 minutes.

Dede and Friedman (2), in an excellent review of 88 cases, commented that face presentation did not appear to affect the course of labour in either nulliparous or multiparous patients to any significant degree, contradicting the previously held views that face presentations are associated with prolonged labours.

Nevertheless, there is a definite though not statistically significant trend in face presentation in babies weighing over 2500 g towards longer duration of labour with regards to the latent, active and deceleration phases and the second stage.

The relationship of feto-pelvic disproportion in face presentation to abnormal labour patterns is obvious.

In Cucco's series (1), 75% of patients delivered within 12 hours of labour and 7.5% after a labour of over 24 hours. The mean length of labour before delivery or caesarean section was 22 hours in primigravidas and 13.5 hours in multigravidas in Posner's series (6).

7. Mode of Delivery

Nine patients (56.3%) delivered spontaneously, 2 by forceps (12.5%) and 5 by caesarean section (31.2%). Of the 5 delivered by caesarean section, 3 were for clinical fetal distress, one for obstructed labour due to brow posterior and one for feto-pelvic disproportion (where postpartum X'ray pelvimetry showed the pelvis to be adequate and gynaecoid).

Caesarean section rate is high in face presentation with incidences varying from 7.5% to 53.0% (1, 2, 4, 6, 7, 8). This reflects the association of this form of malpresentation with dystocic labour and fetal distress.

Nevertheless, there are indications for good prognosis for vaginal delivery in face presentations, especially with mento-anterior positions (1, 5). Vaginal delivery in face presentation varies from 60.0% to 90.0% (1, 2, 5, 6, 8).

8. Maternal and Fetal Outcome

There was no maternal death and no maternal morbidity.

All 16 infants were live births. There was no stillbirth. Two of the infants died in the perinatal period, one because of anencephaly and the other of gross prematurity (birth weight of 900 g at 29 weeks gestation).

Six infants had an apgar score of 6 and below at one minute, while 10 infants had apgar scores of

7 to 10. At 5 minutes, only 2 infants had apgar scores of 6 and below and 14 infants had scores of 7 to 10. Of these two, one was the grossly premature infant and the other was a mature infant delivered by caesarean section. This latter infant had an uneventful neonatal progress.

Dede and Friedman (2) reported an increase in maternal morbidity but commented that this was related to the operative intervention rather than to the presence of face presentation per se.

In this paper, there was no fetal loss directly related to face presentation per se. Corrected perinatal loss have been reported at 37 to 47 per 1000 births (6, 7), although higher incidences of 100 per 1000 (3) and 130 per 1000 births (2) have been reported.

COMMENTS

One can make the following comments about face presentation:

- 1) there is a lack of accuracy in early detection and so obstetricians should have an acute sense of suspicion and recognise the malpresentation early
- 2) the important predisposing factors include disproportion, prematurity and large fetal size
- 3) once the diagnosis is made, the pelvis should be assessed to be adequate by X'ray pelvimetry and fetal abnormality excluded
- 4) in the presence of feto-pelvic disproportion and no fetal abnormality, delivery is best effected by caesarean section
- 5) early caesarean section should be practised more liberally in elderly primigravidas, mento-posterior positions, large babies and suspect pelvis
- 6) in the other cases, lack of fetal mortality and significant morbidity warrants a more conservative attitude. The maxim should be "if a *face* is making progress, leave it alone". This maxim should hold true even for mento-posterior positions because spontaneous rotation to mento-anterior occurs in a fairly large number of cases
- 7) conversion procedures have met with indifferent success and are best avoided in modern day obstetric practice. Internal podalic version and breech extraction should never be done

- 8) the Kielland's forceps may be employed in a few carefully selected cases after full dilatation
- 9) the freer use of caesarean section and the avoidance of complicated vaginal procedures will no doubt help towards an increased perinatal salvage.

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