# Primigravidas With Floating Head At Term Or Onset Of Labor

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#### Citation

B Ambwani. *Primigravidas With Floating Head At Term Or Onset Of Labor*. The Internet Journal of Gynecology and Obstetrics. 2003 Volume 3 Number 1.

#### **Abstract**

This study was undertaken in Holy Cross Hospital Kottiyam, Kollam, Kerala in response to an increase in overall Caesarean section rate. The incidence of active medical and surgical intervention in cases of primigravidas with floating head at onset of labour some sort of interference was required in 40% of cases. However 66% of total cases delivered vaginally when proper supervision and early decision when required was undertaken. Cephalopelvic disproportion, occipitoposterior position and placenta praevia should be suspected in most cases of floating heads. The attitude of watchful expectancy and timely intervention is used in all cases, especially in those in which no aetiological factor is found, by plotting progressive labour on a partogram and using oxytocin judiciously when labour appears to be taking a protracted course. If this is followed most of these cases will deliver vaginally with minimal maternal and foetal morbidity. In 64% of the cases labour lasted more than 12 hrs.

Parturition, encompasses all physiological processes involved in birthing. There are 4 phases from uterine quiescence, awakening, active labour and the puerperium. It has been the traditional concept of obstetrics that engagement of head occurs by 38 weeks in primigravida. This traditional concept is not correlated in clinical practice. In majority the engagement occurs between 38-42 weeks or even during first stage of labour. The incidence is very variable in different studies.

The aims and objectives of this study were for the following.

- To find the aetiological factors for primigravida with floating head at onset of labour and their incidence.
- Partographic analysis of progress of labour in a primigravida with floating head at onset of labour with regard to duration of labour and type of uterine action
- 3. Role of active medical or surgical intervention

## **MATERIALS AND METHODS**

From a total of 944 deliveries from August 1999 to July 2000 with 479 primigravidas, 100 primigravidas with floating head at the onset of labour were selected. All cases

were studied in detail with reference to course of labour, mode of delivery, interference required and maternal and foetal outcome. A detailed history was taken and general and systemic examination was done. The Muller Munro Kerr(6) manoeuver was used to assess the adequacy of the pelvis and diagonal conjugate was accurately measured.

Intrapartum ultrasonography was done for exact gestational age, BPD, placental position and to rule out any congenital anomalies.

The course of labour in all these cases was recorded on a partogram.

## **OBSERVATION AND RESULTS**

The incidence of primigravidas with floating head at the onset of labour in our series was 20.87% (Table-1). 60% of the patients were between 21 and 25 years. Most common aetiological factor was deflexed head, the most important of which was occipitoposterior position. The next common was cephalopelvic disproportion. In 40% of cases no aetiological factor was found (Table II).

Figure 1

Table 1: Showing the incidence of Primigravidas and the incidence of Floating head at term

| Total no. of<br>Deliveries<br>From August | PRIMIGRA VIDAS |            | PRIMIGRAVIDAS WITH FLOATING HEAD |            |
|---|----------------|------------|----------------------------------|------------|
| 1999 to July<br>2000                      | NO.            | PERCENTAGE | NO.                              | PERCENTAGE |
| 944                                       | 479            | 50.74      | 100                              | 20.78      |

Figure 2

Table 2: Showing distribution of the cases according to Aetiology

| APPARENT AETIOLOGY             | NO. OF CASES | PERCENTAGE |  |
|--------------------------------|--------------|------------|--|
| Deflexed head                  | 30           | 30%        |  |
| Cephalopelvic disproportion    | 20           | 20%        |  |
| Premature rupture of membranes | 4            | 4%         |  |
| Placenta praevia               | 3            | 3%         |  |
| Loops of cord around the neck  | 6            | 6%         |  |
| Hydramnios                     | 2            | 2%         |  |
| Hydrocephalus                  | 1            | 1%         |  |
| Prematurity                    | 1            | 1%         |  |
| No aetiological factor found   | 40           | 40%        |  |

Vaginal delivery occurred in 66% of cases and lower segment caesarean section in 34% of the cases (Table III). No interference by ventouse or forceps was required in 60% of cases. Vaginal trial failed mainly in cases of cephalopelvic disproportion, premature rupture of membranes, Cases with loops of cord around the neck and occipitoposterior position. In our study it failed in 16 cases. In 64% of cases labour lasted more than 12 hours. Foetal and maternal outcome was good (Table IV) The outcome of cases according to the apparent aetiology of the floating head at onset of labour is shown in table V.

Figure 3

Table 3: Showing the distribution of cases according to the mode of Delivery

| NO.OF CASES | PERCENTAGE |  |
|-------------|------------|--|
| 66          | 66%        |  |
| 34          | 34%        |  |
|             | 66         |  |

## Figure 4

Table 4: Foetal Outcome (Apgar Scores at 5 minutes)

| APGAR AT 5 MINS. | NO. OF CASES |  |
|------------------|--------------|--|
| 7-10             | 80           |  |
| 4-6              | 15           |  |
| 3                | 5            |  |

#### Figure 5

Table 5: Showing outcome of cases according to apparent aetiology

| APPARENT<br>AETIOLOGY             | NO. OF CASES   | LSCS | VAGINAL<br>DELIVERY<br>WITHOUT AID | VAGINAL<br>DELIVERY<br>WITH AID |
|-----------------------------------|----------------|------|------------------------------------|---------------------------------|
| CPD                               |                |      |                                    |                                 |
| Contracted pelvis                 | 13             | 13   | 0                                  | 0                               |
| Big size baby                     | 7              | 3    | 2                                  | 2<br>10                         |
| Deflexed head                     | 30             | 16   | 4                                  |                                 |
| Premature rupture<br>of membranes | 4              | 2    | 1                                  | 1                               |
| Placenta praevia                  | 3              | 3    | 0                                  | 0                               |
| Loops of cord<br>around neck      | 6              | 3    | 2                                  | 1                               |
| Hydramnios 2                      |                | 0    | 2                                  | 0                               |
| Prematurity                       | rematurity 1   |      | 0                                  | 0                               |
| Hydrocephalus                     | ydrocephalus 1 |      | 1                                  | 0                               |
| No aetiological 40 factor found   |                | 0    | 27                                 | 13                              |

### **DISCUSSION**

This study was carried out on one hundred primigravidas with floating heads at onset of labour out of 479 primigravida attending labour room from August 1999 to July 2000. The aims were to find the aetiological factors and to analyze the progress of labour with regard to duration of labour, uterine action, outcome of labour and the incidence of active medical and surgical intervention. In our study the incidence was 20.87% (Table 1). In the Auer and Simmons (1) series the incidence was 9.26%. In Bhatt and Shirali(3) it was 19.35%. However in the Charles Stipp(5) series and Ghosh and Chaudary the incidence was 55.2% and 51.9% respectively. Thus the incidence is extremely variable. In most cases of primigravidas the head gets engaged by 38 weeks(2). Hence they should be investigated for any significant etiological factor which would help us in better management. In our series a significant etiological factor like deflexed head, cephalopelvic disproportion, PROM, brow, prematurity, loops of cord around neck, hydramnios and placenta praevia was found in 60% of cases. Friedman et al(4) stated that in primigravidas with floating head latent phase is increased and mean duration of labour was 14.4 hrs. In our series, in 64% of the patients labour lasted more than 12hrs, the causes being improper adaptation of presenting part, high station at beginning of labour, deflexed head, misdirection of uterine expulsive forces, high incidence of rupture of membranes and dry labour and ineffective uterine contractions.

The overall rate of LSCS in such cases was 34% as compared to 15% of overall rate. There were no neonatal deaths. There were no serious maternal complications except third degree perineal tear.

So a careful approach of watchful expectancy and timely intervention if undertaken can reduce the incidence of caesarian section in these cases which reduces the cost and morbidity.

# **CONCLUSION**

In conclusion it can be said that the incidence of active medical and surgical intervention in the cases of primigravidas with floating head at the onset of labour is quite high. A high total duration of labour can also be expected in these cases. If the attitude of watchful expectancy and timely intervention is used in these cases, specially in those cases in which no significant etiological factor is found, by plotting a progressive labour on a partogram and using oxytocin judiciously when labour appears to be taking a protracted course, most of these cases will deliver vaginally with minimal maternal and fetal morbidity.

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