BREECH PRESENTATION

ORIGINAL
PROF-1967

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ABSTRACT... Objective: To determine the frequency of breech presentation at term. **Design:** Cross sectional study. **Setting:** Department of Obstetrics and Gynaecoogy, Unit-III, Nishtar Hospital, Multan. **Period:** June 2010 to May 2011 **Material and methods:** This study was carried out in women with the age group 0-40 years. Breech presentation at term (37-41 completed weeks). **Results:** The frequency of breech presentation at term was found to be 6.2%. 91% (215) of the patients were delivered by caesarean section and 9% (20) were delivered vaginally. Placenta previa and multiple pregnancy 8.51% each, congenital anomalies 4.25% and in 16.17% of the patients, no obvious cause was found. **Conclusion:** It is concluded from the study that the frequency of the breech presentation at term increased.

Key words: Breech presentation, frequency, morbidity, caesarean section.

INTRODUCTION

The breech presentation occurs when fetal buttocks or lower extremities present in approximately 3% of all vaginal deliveries[1]. The incidence of breech deliveries is variable between different centres[2]. The incidence of breech presentation is approximately 25% before 28 weeks of gestation, 14% at 29-32 weeks and 2.2-3.7% at term, 5% at 40 weeks[3]. The occurrence of breech presentation decrease with advancing age[4,5,6].

In most of the cases of breech, there is no reason for the fetus to present by the breech. However, it is useful to look for factors that predispose to breech presentation and ultrasound is useful in this respect. Predisposing factors for breech presentation include uterine distension or relaxation (grand multiparity, multiple gestation, polyhydramnios) uterine anomaly, pelvic tumours, fetal abnormalities (anencephaly, hydrocephalus, low birth weight) maternal or obstetrical conditions (previous breech, oligohydramnios, multiparity, advanced maternal age, preterm delivery) and placenta previa[7,8,9].

The breech commonly presents with flexion at the hip and extension at the knees (extended breech) followed by the Breech pregnancy with flexion at the hips and knees (fixed or complete breech). At times one leg could be flexed and the other extended (incomplete breech). Rarely one or both feet may present (footling breech) and at times it may be knee presentation. Breech presentation increases the risks of morbidity and mortality to both fetus and mother. With routine prenatal screening congenital malformation as became a rarer cause leaving prematurity, both asphyxia due to cord accidents and trauma as the main cause of morbidity. In case of footling breech there is greater chance of cord prolapse and it may be as high as 10%. Although the risk increment is largely caused by the aforementioned predisposing factors for breech presentation, mode of delivery, either vaginal delivery or caesarean section is the topic of major concern. Although current literature recommends elective caesarean section for term breeches, training in assisted vaginal delivery is needed as some mothers elect to have assisted vaginal births10.

The incidence of breech presentation at term is 3-4% but over the past few years we have noticed that the number of patients having breech presentation has increased. We conduct this study to find out the frequency of breech presentation at term in our institution.

MATERIAL AND METHODS

This cross sectional study was conducted at the Department of Obstetrics and Gynaecology, Unit-III,

Nishtar Hospital, Multan. All the obstetrical patients admitted in labour ward through emergency or outpatient department were included by purposive sampling in this study. The patient were thoroughly examined, diagnosis of breech presentation was confirmed by the ultrasonography. It was an observational study.

RESULTS

A total of 3600 obstetrical patients were admitted in labour ward through emergency and outpatient department of Obstetrics and Gynaecology, Nishtar Hospital, Multan. The study period was one year from June 2010 to May 2011.

Table-I shows that out of these 3600 patients, 235 presented with breech, at term. So the frequency of breech presentation at term turned out to be 6.5%.

Out of 235 patients, 215 (91%) had caesarean breech delivery while 20 (9%) patients had vaginal breech deliveries (Table-II).

Primiparity was observed in 70 (29.78%), previous C/S in 40 (17.02%), oligohydraminios in 37 (15.74%), placenta previa and multiple pregnancy in 20 (8.51%) each. Congenital anomalies in 10 (4.25%) of the patients, while in 38 (16.17%) of the patients no obvious reason for breech presentation was found.

Table-I. Frequency of the breech

Total patients	Breech	%age
3600	235	06.5

Table-II. Mode of delivery

Mode of delivery	No. of patients	%age
Caesarean breech	215	91.0
Vaginal breech	20	09.0

Table-III. Factors associated with breech presentation

Factor	No. of patients	%age
Primigravida	70	29.78
Previous C/S	40	17.02
Oligohydramnios	37	15.74
Placenta previa	20	8.51
Multiple pregnancy	20	8.51
Congenital anomaly	10	4.25
No obvious case	38	16.17

DISCUSSION

In our present study, we found that the frequency of breech presentation at term has increased. The frequency in Siriraj Hospital during 2004-2007 was 2.9%, 4.1%, 4.6% and 4.5% respectively[11]. We have also noticed that majority of the patients in our study were delivered by caesarean section. In the above mentioned study, in each year the rate of caesarean breech delivery was 86.7%, 89.3%, 92.9% and 92.1% respectively whereas that of vaginal breech delivery was 13.3%, 10.7%, 7.1% and 7.9% respectively. Systemic review and meta analysis revealed that vaginal delivery of breech fetus has high incidence of major labour complications including cord prolapse, nuchal or extended arms and head entrapment[12,13]. The causes of these may be uterine constriction ring and the cause of constriction ring may be uterine contraction with the condition of abnormal presentation which cannot be delivered normally. Hannah et al published the first multinational randomized trial evaluating the effect of planned vaginal delivery in term breech fetus[14]. It was found that neonatal mortality and morbidity was lower in caesarean section group compared with vaginal delivery group (1.6% vs 5%).

In 2001, the American College of obstetricians and gynaecologists recommended that patients with persistent breech presentation at term in singleton should undergo a planned caesarean delivery. Nevertheless it is stated that a planned caesarean delivery does not apply to patients presenting in advanced labour with a fetus in the breech presentation in whom delivery is likely to be imminent or to patients whose second twin is in the non vertex position[15].

Although caesarean breech delivery can reduce complications found in vaginal breech delivery, it cannot get rid off all the complications. Obstetricians still should

have to be skillful with accurate techniques of vaginal breech assistance and breech extraction because such techniques are also appropriate to deliver a baby during caesarean section. Using the right technique can facilitate delivery and avoid injuries to the baby.

In present study we also noticed factors associated with an increased incidence of breech presentation at term. Our results agree with that of conducted by Roberts in which primary parity was one of the important predictors of breech presentation at term[16]. Carpenter found that lethal renal malformations with breech presentation[17], so there is significant association of congenital anomalies with persistent breech presentation.

CONCLUSIONS

It is concluded from the study that the frequency of breech presentation at term has increased. It was found to be 6.5%.

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"The true measure of a man is how he treats someone who can do him absolutely no good."

Samuel Johnson (1709-1784)