Breech Pregnancies in a Tertiary Care Hospital: A Prospective Observational Study

Ufaque Muzaffar
Health and Family Welfare Department, India

Introduction: Breech presentation is commonest malpresentation with an incidence of 3-4% at term. Incidence is about 20% at 28 weeks of pregnancy and drops to 5% at 34 weeks. Common etiological factors associated with breech pregnancy are prematurity, multiple pregnancy, congenital foetal and uterine malformation, foetal growth restriction, contracted pelvis, placenta praevia etc. [2] The management of breech delivery continues to be debatable.

Methodology: This prospective study was carried out in Lalla Ded Hospital, Department of Obstetrics and Gynaecology, GMC Srinagar for a period of 8 months from 1st September 2018 to 31st April 2019. 175 Cases of Breech Pregnancy were studied. Results: In the present study incidence of breech pregnancy was 3.6%. It was observed that the highest incidence of breech pregnancy in the age group of 21 to 25 years. Maximum (60%) cases delivered after 37 weeks of gestation. In our study 60% cases were primigravida and 40% were multigravida. Majority of cases (77.14%) delivered by caesarean section. Conclusion: Authors need to study and analyse all cases of breech pregnancy individually to decide the management and mode of delivery depending on cases to case basis and expertise of the staff available. Delivery of breech foetus should be conducted by experience obstetrician after appropriate consent from pregnant women and her relatives.

Breech presentation is commonest malpresentation with an incidence of 3-4% at term. Incidence is about 20% at 28 weeks of pregnancy and drops to five at 34 weeks. Common etiological factors related to breech pregnancy are prematurity, multiple pregnancy, congenital foetal and uterine malformation, foetal growth restriction, contracted pelvis, placenta praevia etc. The management of breech birth continues to be debatable. In 2015 recent Cochrane review published quite 90% reduction in perinatal mortality and neonatal morbidity during a planned cesarean delivery. In 2000 Lancet published the results of term breech trial. This clearly concluded that planned cesarean delivery is best than planned childbirth for the term foetus with breech delivery in terms of neonatal outcomes. However, an effort to enhance the neonatal outcome has resulted within the following effects also. Firstly, there has been decline within the number of obstetricians ready to conduct a vaginal breech birth and it's also resulted in higher cesarean delivery rate and its complications. To conclude there's a requirement to gauge above observations within the context of obtainable resource settings.

This prospective study was administered in Lalla Ded Hospital, Department of Obstetrics and Gynaecology, GMC Srinagar for a period of 8 months from 1st September 2018 to 31st April 2019. 175 Cases of Breech Primigravida or multigravida, Booked or unbooked cases, Patients admitted in labour room or antenatal wards who delivered with clinical or ultrasound diagnosis of breech pregnancy after 20 weeks of gestation. Pregnancy were studied. Patients with diagnosis of breech pregnancy at 20 or but 20 weeks of gestation.

A detailed study of all cases was done. Each patient was asked for detailed menstrual and obstetric history, history regarding antenatal care and number of visits. A careful general physical examination and systemic examination was administered altogether the patients. Per-abdominal examination included fundal height, abdominal girth, foetal presentation, engagement, foetal heart sounds and uterine contractions. Per-vaginal examination was done and position, effacement and dilatation of cervix was noted. Presence of bag of membrane, presenting part, station and adequacy of pelvis was also noted. Routine investigation like haemoglobin, urine sugar, urine albumin was done. Women having obstetric indication for cesarean delivery like foetopelvic disproportion, hyper extension of foetal head, footling presentation and associated medical complications were assigned to the cesarean delivery group. Plan of delivery was discussed with...
patients and attendants. Trial of vaginal delivery was given to the patients who gave consent for an equivalent.

This study includes 175 cases of breech pregnancy to review maternal and neonatal outcome. The analyzed data was further compared with different studies and discussed thereafter. Between 21-25 years age group, as in India maximum number of girls who conceive fall during this age bracket due to early marriage and early pregnancy. After age of 30, incidence of breech pregnancy decreases because lesser number of females conceive after age of 30.

Breech presentation is defined as a foetus during a longitudinal roll in the hay buttocks or feet closest to the cervix. the share of breech deliveries decreasing with advancing fetal age from 22% of birth before 28 weeks of gestation to 7% of birth at 32 weeks of gestation and further to 1-3% of births at term. The incidence of breech pregnancy is 3-4%. In our study the incidence of breech pregnancy was highest (68.57%) within the age bracket of 21-25 years. and the same conclusion was drawn in study done by Panda R et al, during which maximum (47.4%) occurrence of breech pregnancy was seen within the age bracket of 20-25 years and therefore the incidence was 47.5% within the same age bracket as per study done by Singh A et al. In our study most of cases (60%) delivered at quite 37 weeks of gestation. between the study done by Singh A et al, 73.4% cases delivered between 37-42 weeks of gestation.

Complete breech is more common in multiparous and incomplete breech more in primipara. the foremost common explanation for breech is prematurity due to small baby and enormous liquor most of the babies spontaneously revert back to cephalic position till term. Persistent breech is due to many obstacles that prevent reversion this includes; prematurity, being commonest, other being hydrocephalus, pregnancy , cornufundal attachment of placenta, et al and uterine anomalies, polyhydramnios, oligohydramnios.

Incidence of Breech before 28weeks is 7%and this reduces to 1-3% at term. Prematurity, fetal structural anomalies, hypoxia and trauma related to vaginal breech birth are liable for increased perinatal mortality and morbidity. Breech especially footling and knee presentation results in early rupture of membranes with cord prolapse. Incidence of Cord prolapse in Breech is 4-5%. it's high in footling presentation.

There is a substantial debate regarding mode of delivery just in case of breechd presentation. Inspite of excellent antenatal care and modern hospital facilities vaginal breech remains considered as a high risk delivery because it is related to major complications. American college of Gynaeecologists and obstetricians (RCOG UK) 2001 guidelines recommends elective cesarean delivery for all term breech (ACOG committee opinion No.265, RCOG Green top no.20. In 2006 both ACOG and RCOG recommended certain circumstances where only trial of labour is justified in Breech (ACOG committee opinion no. 340 RCOG guidelines no.20b

Similarly, within the study done by Panda et al majority of cases (78.35%) delivered at quite 36 weeks of gestation.6 In our study 60% cases were primigravida and 40% were multigravida. This result was almost like the study done by Kavita et al, where primigravida constituted 62% and Panda R et al were 52.56% cases primigravida. In our study majority of cases (77.14%) were delivered by cesarean delivery . Similar results were observed by Goffinet et al, were 77.8% cases were delivered by cesarean delivery and Hannah et al were 66.7% cases delivered by cesarean delivery.

In our study 11.42% cases were having premature rupture of membrane which correlates with study by Panda et al R during which 9.2% of cases were having prematurity rupture of membrane. Vaginal breech deliveries provide us a chance to coach obstetricians to conduct vaginal breech deliveries and also prevent uterine scar and its future complications. cesarean delivery for breech delivery has been suggested as how of reducing the associated perinatal problem. the ultimate mode of delivery should be selected case to case basis.

Seen in 63.6% of patients. The increased incidence of LSCS in our hospital was due to liberal use of cesarean delivery for breech so as to scale back perinatal mortality and morbidity. Among the varied etiological factors of breech in our study the foremost common factor is prematurity (50%), followed by multiparity.
(20%) polyhydraminos (4.7%) and oligohydramino (2.3%) In study done by sonali oligohydramino was seen in 3%

of patients, Uterine anomalies are seen in 2.3% of patients, hydrocephalus in 2.96%, idopathic in 12.94% and short cord in 4.7%. Short cord is additionally a explanation for breech delivery as shown by Adinma's study during which 1000 cases were observed to possess a brief cord. Since Breech is additionally related to fetal anomalies, oligohydramino, polyhydraminos, short cord, uterine anomalies so it's important to seem for of these conditions either by USG or at the time of LSCS.

LSCS in our institute was more among primi paras, vaginal delivery was mostly in multiparous patients with preterm babies. thanks to liberal use of LSCS neonatal mortality rate was less almost like study by Sanjivini et al. Hannah ME et al. has also proposed liberal use of LSCS for breech to decrease perinatal mortality and morbidity. This was further supplemented by ACOG recommendation for LSCS for singleton breech in 2001.

The most common fetal complication liable for NICU admission in our study was low birth weight of babies, this was followed by prematurity. Other complications were intracranial hemorrhage, fetal injuries, and congenital anomalies, there was none case of birth asphyxia. Only two babies died of intracranial hemorrhage and birth injuries.

Conclusion: To conclude mode of delivery should be decided supported individual case and therefore the training level of the available staff. Vaginal breech birth should be conducted after explaining all the advantages and risks involved to the cases and obtaining due consent from the pregnant female and her relatives. Also, whenever an attempt of vaginal breech birth is obtainable arrangement should be made for an emergency cesarean delivery just in case of failure of vaginal delivery.