

## PERINATAL OUTCOME OF VAGINAL BREECH DELIVERY VERSUS CAESAREAN BREECH DELIVERY

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### Abstract

**Background:** The aim to find out any differences in outcome between vaginal breech delivery and cesarean breech delivery in our setup

**Methods:** Data were collected from record book of Department of Gynecology and obstetrics. Data of 100 patients were analysed among which 36 underwent vaginal delivery for breech and 64 underwent cesarean breech delivery

**Results:** Binary logistic regression was used to compare outcome among different groups. In our study only 5.56% of newborn delivered by vaginal route were admitted to NICU vs. 12.50% in cesarean group which was significant (odds ratio=0.07, P=0.01)

**Conclusion:**

**Keywords:** LSCS, Breech, NICU

### Introduction

Breech presentation is a longitudinal lie of the fetus with the caudal pole (buttock or lower extremity) occupying the lower part of the uterus and cephalic pole in the uterine fundus<sup>1</sup>. There are three types of breech presentation. In the frank breech position (48 to 73%), both hips are flexed and both knees are extended. In the complete breech position (4.6 to 11.5%), both hips and both knees are flexed. In the incomplete breech position (12.4 to 40.5%), one or both hips are not completely flexed.<sup>2</sup>

A study done in Lumbini medical college showed that out of 80 selected women with breech presentation, 42 of them had vaginal deliveries and 38 women had undergone caesarean section. The perinatal mortality was 4.8% and morbidity was 2% in vaginal breech deliveries. There was no significant difference of APGAR score in the two groups at any time. Similarly, there was no significant difference in perinatal morbidity and mortality in the two groups. Nulliparous women were more likely to deliver by cesarean section.<sup>3</sup> Another study in Patan Academy of Health Sciences concluded that in well-selected cases, the neonatal outcome following assisted vaginal breech delivery and caesarean section may not be different.<sup>4</sup>

### Methods

Type of study: It is a descriptive cross-sectional study

**Study Palace:** Department of Obstetrics and Gynecology, Jhalawar Medical College, Jhalawar

**Study population:** Study Conducted among the pregnant women with breech presentation

**Methods of Data Collection:** Secondary data were collected from the record of the department. Pregnant with breech presentation who had delivery in the center were enrolled in the study. Data on age of patients, gravida, Parity, living child, abortion, previous neonatal death, period of gestation, mode of delivery (vaginal, cesarean delivery, instrumental) outcome (APGAR score at 1 min and 5 min, neonatal care unit admission, death, birth injuries) were collected.

**Data Analysis:** Collected data first entered into Microsoft excel first then analysed using SPSS 25. Mean, frequencies and percentages were calculated for demographic data and categorical variables. Significance of categorical variable was analyzed using Chi square test.

### Results

Data of 100 patients were analyzed among which 36 underwent vaginal delivery for breech and 64 underwent cesarean breech delivery.

**Table 1: Frequency table of age group, parity and period of gestation in different mode of delivery**

Variable	Vaginal delivery (n=36)	LSCS (n=64)	p-value
Age (mean ± SD)	23.12±2.16 Yrs	22.39±2.09 Yrs	0.321
Primi : Multi para	29 : 7	49 : 15	0.369

The age & parity and type of delivery wise difference in both groups were found statistically Insignificant.

**Table 2: Binary logistic regression analysis of comparison of outcome among vaginal breech and cesarean breech delivery**

NICU admission	Vaginal delivery(n=36)	LSCS (n=64)	Odds ratio	p-value
Yes	2(5.56%)	8(12.50%)	0.07	0.01
No	34(94.44%)	56(87.50%)		

Binary logistic regression was used to compare outcome among different groups. In our study only 5.56% of newborn delivered by vaginal route were admitted to NICU vs 12.50% in cesarean group which was significant (odds ratio=0.07, P=0.01)

### Discussion

With time and advent of safe surgical techniques more and more cesarean breech delivery are being performed worldwide. Cesarean breech delivery is considered safe mode of delivery for breech presentation.<sup>5,6,7</sup> With more cesarean breech delivery being done, experience for vaginal breech delivery is decreasing so the risk for adverse outcome is increasing. In the centers where vaginal breech delivery is performed more frequently outcome is still good in experienced and skilled hands.<sup>8-11</sup>

Similar to study conducted in Ethiopia where prevalence was 3.4%.<sup>3</sup> 12.50% newborn following cesarean breech delivery were admitted in neonatal care unit while 5.56% of newborn following vaginal breech delivery were admitted in NICU. As a subtotal population in NICU admission is less, superiority of vaginal delivery over cesarean delivery cannot be made, further multicenter study with larger sample size is required.

### Conclusions

Though perinatal morbidity was more with cesarean breech delivery but further study with more sample size is needed before reaching conclusion

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