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RETROSPECTIVE ANALYSIS OF PERINATAL OUTCOME OF BREECH DELIVERY BY VAGINAL ROUTE IN MULTIPAROUS WOMEN.

[1]Dr. S. V. Nachiketha* and [2]Dr. Veena Hadi

[1]Associate Professor OBG Department KIMS Hubli Karnataka India.
[2]Junior Resident OBG Department KIMS Hubli Karnataka India.

Corresponding Author: Dr. S. V. Nachiketha

Associate Professor OBG Department KIMS Hubli Karnataka India.

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ABSTRACT

Objective: This study was carried out to ascertain perinatal outcome of breech cases delivered by vaginal route in multiparous women. **Methods:** This was a retrospective observational study done in Kims HUBLI. The data was collected from the mother's medical records and neonatology records. Primary outcomes of study included neonatal mortality, morbidity and Low 5-minute Apgar score, admission to neonatal intensive care unit, maternal morbidity. **Results:** Out of 100 multigravida cases selected, who delivered vaginally. Perinatal mortality was 6%. Maternal morbidity was 2%, both patients had postpartum hemorrhage. **Conclusions:** Delivery of breech fetus when labor and delivery is supervised and conducted by experienced obstetrician lowers neonatal morbidity, maternal morbidity and mortality. We emphasise the need for specific precautions like close monitoring of labour and adequate anticipation for neonatal resuscitation in order to reduce complications.

KEYWORDS: Breech, Vaginal delivery,Term breech trial(TBT).

INTRODUCTION

The right way to handle the delivery of fetuses in breech presentations is a topic of debate for deciding the route of delivery[5], as we see around 3-4% of all deliveries are breech deliveries.[1] For trial of vaginal breech delivery there is lot of controversy regarding candidate selection.For use of planned caesarean delivery in breech presentation there is not much evidence for preterm babies, as well as term babies.[2]

The Term Breech Trial (TBT)by Hannah et al[6], published in 2000, showed perinatal mortality and morbidity of fetuses in breech position following planned caesarean delivery is lower compared with planned vaginal delivery. And it had great influences in changing clinical practice in a number of countries and several experts criticised this conclusion of TBT.[9] TBT confirmed that neonatal risks associated with term breech births are much higher among planned vaginal deliveries and implied that cesarean deliveries should be systematically planned for all such women. Still caesarean section does not eliminate the risk of neonatal morbidity completely and it is also associated with risks of anesthesia and operative complications.[3] There has been shown that as much as thirty nine caesarean sections are required to prevent one neonatal death or adverse neonatal outcome in low-income countries compared with seven caesarean sections needed in high-income settings. Hence, low-income countries would require significant additional investments in their healthcare systems for policy generalising the indication of caesarean section to all breech presentations. And also subsequent pregnancies are at increased risk of complications by the presence of a scarred uterus such as placenta accreta, and placenta praevia, uterine rupture, repeat caesarean section and repeat breech presentation[4] so there is increase in both short and long-term maternal morbidity and maternal mortality when cesarean delivery done for all breech presentation cases. So there is contraversy whether the TBT results are unequivocal evidence that answer to all term breech presentation is caesarean section.[13]

In our center, it is the practice to assess all women with persistent breech presentation at term and decide on the best route of delivery for booked cases.In selected cases assisted breech delivery is done with the neonatologist and anaesthesiologist in attendance. As most of unbooked women presenting in 2nd stage of labour delivered by assisted breech delivery. In short decision of delivering breech should be individualized.[7] The current study is an attempt to analyse perinatal outcome in assisted breech vaginal delivery in multigravida.

METHODS

This was a retrospective study comprising of 100 cases of breech presentation delivered after 37 week of

gestation at KIMS HUBLI Karnataka India Hospital from January 2016 to december 2017.

OUTCOME MEASURES STUDIED

Neonatal mortality, neonatal morbidity (need for NICU, fractures, paralysis, respiratory distress, AGAR score at 5 minutes, congenital anomalies), and maternal morbidity.

INCLUSION CRITERIA

Vaginal breech deliveries in singleton pregnancy in gravid 2 and above.

EXCLUSION CRITERIA

- Pregnancy with cephalic presentation.
- Compound presentation.
- Presenting with intrauterine fetal death.

STATISTICAL ANALYSIS

After data collection, data entry was done in Excel. Data analysis was done with SPSS Software version 15.

RESULTS

Table 1: Demographic details in study.

Age groups	Frequency	Percent
<=20 yrs	1	1%
21-25 yrs	58	58%
26-30 yrs	29	29%
>=31yrs	12	12%
Gravida		
Gravida 2	42	42%
Gravida 3	31	31%
Gravida 4	18	18%
Gravida 5 and above	9	9%
Gestational age		
37	38	38%
38	23	23%
39	17	17%
40	14	14%
41	6	6%
42	2	2%
ANC status		
Booked	16	16%
Unbooked	84	84%

Most of the patients were in age group between 21-30 years. Out of 100 patients 42 patients were gravid 2 and 9 were gravida 5 and above, majority of patients were unbooked cases (84%) presenting in active labour.

Table 2: APGAR Score, Nicu Admission, Birth weight.

Variable	Frequency	Percent
APGAR score <7 at 1 min	11	11%
APGAR score <7 at 5min	6	6%
NICU admissions	13	13%
Birth weight 2000 -3000g	83	83%
Birth weight 2000 -3000g	17	17%

Most of babies (83%) of birth weight between 2 kg to 3kgs and 13 were admitted in NICU.

Table 3: Fetal and maternal morbidity in vaginal breech delivery.

Variable	Frequency	Percent
Birth asphyxia	5	5%
Brachial plexus lesion	2	2%
Humerus bone fracture	1	1%
Dislocation of hip	1	1%
Septicaemia	3	3%
Congenital anomalies	2	2%
Seizures (intracranial hemorrhage)	1	1%
Post partum hemorrhage	2	2%

Birth trauma seen were brachial plexus lesion(2 %), fracture of humerus (1%), hip dislocation (1%), asphyxia (5%) and early onset sepsis (3%).congenital anomalies were congenital diaphragmatic hernia[1] and trachea oesophageal fistula.[1] Post partum hemorrhage seen in 2% of cases.

Table 4: Perinatal mortality in vaginal breech delivery.

Variable	Frequency N=6	Percent
Early neonatal death	4	4%
Late neonatal death	2	2%
Total	6	6%

Total neonatal death (6%), most (4%) were early neonatal deaths because of birth asphyxia causing respiratory distress.

DISCUSSION

In our retrospective analytical study of 100 cases of breech presentation in multigravida delivered at KIMS HUBLI hospital, most (83%) of babies were with birth weight of 2000 -3000g, 13 % babies had NICU admissions. In our study the birth trauma observed in vaginally-delivered infants were, 2% babies had brachial plexus lesion,1% with hip dislocation, 5% with birth asphyxia and 1% with a fractured humerus similar to study conducted by *H. Alshaheen et al and 2% of mothers had* Post partum hemorrhage. In our study the rate total neonatal deaths is 6% similar to *Chaudhari HK et al study (7.4%).* Perinatal loss in multigravida was 1.7% in study conducted by Fathiya et al in[11] and 2.8% in study conducted by H. Alshaheen et al, 4% of early neonatal death i.e within 7days of birth is observed in our study. In our study most of breech deliveries were unplanned presenting in second stage of labour. Another study showed incidence of perinatal loss was less in multgravida than primigravida (2.4% v/s 3.4%)and concluded that for term singleton infants of multiparas there is not much benefit from cesarean delivery instead there is increased risk of maternal morbidity.[2]

CONCLUSION

Selective vaginal breech deliveries, Proper technique of breech delivery, rigorous intrapartum monitoring and presence of experienced obstetrician and paediatrician are most important factors for good outcome in vaginal breech delivery without affecting the maternal and fetal well-being and helps in decreasing the caesarean section rate specially in multigravid in resources poor countries.

REFERENCES

1. Nahid F. Outcome of singleton term breech cases in the pretext of mode of delivery. JOURNAL-PAKISTAN MEDICAL ASSOCIATION, 2000 Mar; 50(3): 81-5.
2. Chaudhari HK, Tiruke RD, Shah PK. Vaginal birth in singleton breech: revisited. International Journal of Reproduction, Contraception, Obstetrics and Gynecology, 2017 Feb 23; 5(7): 2122-5.
3. Hofmeyr GJ, Hannah M, Lawrie TA. Planned caesarean section for term breech delivery. The Cochrane Library, 2015 Jan 1.
4. Dohbit JS, Foumane P, Tochie JN, Mamoudou F, Temgoua MN, Tankeu R, Aletum V, Mboudou E. Maternal and neonatal outcomes of vaginal breech delivery for singleton term pregnancies in a carefully selected Cameroonian population: a cohort study. BMJ open, 2017 Nov 1; 7(11): e017198.
5. Cheng M, Hannah M. Breech delivery at term: a critical review of the literature. Obstetrics and gynecology, 1993 Oct; 82(4 Pt 1): 605-18.
6. Hannah ME, Hannah WJ, Hewson SA, Hodnett ED, Saigal S, Willan AR, Collaborative TB. Planned caesarean section versus planned vaginal birth for breech presentation at term: a randomised multicentre trial. The Lancet. 2000 Oct 21; 356(9239): 1375-83.
7. Berhan Y, Haileamlak A. The risks of planned vaginal breech delivery versus planned caesarean section for term breech birth: a meta-analysis including observational studies. BJOG: an international journal of obstetrics & gynaecology, 2016 Jan 1; 123(1): 49-57.
8. Nordin NM. An audit of singleton breech deliveries in a hospital with a high rate of vaginal delivery. The Malaysian journal of medical sciences: MJMS, 2007 Jan; 14(1): 28.
9. Bjellmo S, Andersen GL, Martinussen MP, Romundstad PR, Hjelle S, Moster D, Vik T. Is vaginal breech delivery associated with higher risk for perinatal death and cerebral palsy compared with vaginal cephalic birth? Registry-based cohort study in Norway, BMJ open, 2017 Apr 1; 7(4): e014979.
10. Giuliani A, Schöll WM, Basver A, Tamussino KF. Mode of delivery and outcome of 699 term singleton breech deliveries at a single center. American Journal of Obstetrics & Gynecology. 2002 Dec 1; 187(6): 1694-8.
11. Al-Mejhim FM, Al-Najashi SS. Trends in perinatal mortality at King Fahd Hospital of the University, Al-Khobar, Saudi Arabia: a ten years study. Journal of family & community medicine, 1998 Jul; 5(2): 31.