www.jmscr.igmpublication.org
Impact Factor 5.84
Index Copernicus Value: 83.27
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v5i5.187

IGM Publication
Journal Of Medical Science And Clinical Research
An Official Publication Of IGM Publication

For A Singleton Breech Presentation Vaginal Delivery Should Be an Option A Review Over One Year in A Tertiary Hospital

Authors
Dr Anees Aisha[1], Dr Jagadevi[2]
[1]Professor and Head of Department, [2]Senior Resident
Department of Obstetrics and Gynaecology, ESIC Hospital, Kalaburgi

ABSTRACT

Introduction: *Breech is commonest malpresentation, with incidence ranging from 3 to 4% in term gestations. Perinatal mortality is increased 2-4 fold with breech presentation regardless of mode of delivery. Offering a trial of vaginal breech delivery to a well counselled strictly selected patients remains an appropriate option.*

Aims and Objectives

1. *To study the maternal complications like genital tract trauma after term breech delivered vaginally.*
2. *To study the neonatal complications in terms of perinatal mortality, apgar score at 5 minutes, and neonatal trauma in all singleton term breech delivered vaginally.*

Material and Methods: *Hundred patients with singleton term breech presentation delivered vaginally during the year 2015, were studied retrospectively, for maternal and neonatal complications. maternal complications include genital tract trauma and neonatal complications include perinatal mortality, apgar score at 5 minutes, and neonatal trauma*

Results: *Hundred patients with singleton term breech presentation admitted and delivered vaginally were studied retrospectively. All were unbooked cases in labour. 90% were multigravidae and 10 % were primigravidae. An apgar score of >\=8 at 5 minutes was observed in 91% of cases while 4% had apgar score <8 at 5 minutes. there were 5 still births and 2 neonatal deaths. None of the baby had birth trauma. Only 2% of mothers had genital tract trauma (cervical tears).*

Conclusion: *Offering a trial of vaginal breech delivery to selected and well counselled women is an appropriate option without compromising perinatal and maternal outcome. Thus contributing in decreasing the rising caesarean section rate.*

Introduction

Breech is commonest malpresentation, with incidence ranging from 3 to 4% in term gestations. It is a condition in which the baby, at the time of birth, exits the mother's pelvis buttocks- or feet-first. Based on the relation between the baby's lower limbs and the bottom, breech presentation can be classified as: complete (the baby's hips and knees are flexed so that the baby is sitting with feet beside the bottom), and incomplete breech (the baby's legs are folded flat up against the chest); most breech babies are in the incomplete breech position, with bottom coming first. Other types of incomplete breech presentation are the kneeling breech and footling breech.

Factors that have been associated with breech presentation include nulliparity, uterine abnormal-lities, low insertion of placenta, polyhydramnios,

oligohydramnios, multiple pregnancy, prematurity, decreased fetal activity, fetal abnormalities and fetal death. Moreover, there is increased risk of recurrence of this type of presentation in subsequent pregnancies.

Management of breech presentation remains an area of intense controversy. Various options available are external cephalic version (ECV), Planned caesarean section and planned vaginal delivery.

Perinatal mortality is increased 2-4 fold with breech presentation regardless of mode of delivery. The higher perinatal mortality and morbidity associated with breech presentation is principally due to prematurity, congenital malformations, birth asphyxia and trauma.

In 2000, the results of a randomized multicenter trial, theTerm Breech Trial (TBT) were published in the Lancet. The trial reported significantly lower perinatal mortality, neonatal mortality, or serious neonatal morbidity in the planned caesarean section arm (1.6%) versus in the planned vaginal delivery arm (5.0%). After this the ACOG Committee on Obstetric practice in2001 recommended that planned vaginal delivery of a term singleton breech was no longer appropriate.

Offering a trial of vaginal breech delivery to a well counselled strictly selected patients remains an appropriate option. Vigorous intra partum monitoring and proper technique of breech delivery have been established as the most important determinant for successful outcome without compromising fetomaternal wellbeing and decreasing the caesarean section rate.

Aim of this study is to determine the maternal and neonatal complications in terms of genital tr act trauma to the mother, perinatal mortality, APGAR SCORE at 5 mins and neonatal trauma in all term breech cases delivered vaginally.

Aims and Objectives

1) To study the maternal complications like genital tract trauma after term breech delivered vaginally.
2) To study the neonatal complications in terms of perinatal mortality, apgar score at 5 minutes, and neonatal trauma in all singleton term breech delivered vaginally.

Material and Methods

Hundred patients with singleton term breech presentation admitted and delivered vaginally at our hospital during the year 2015 were studied retrospectively, for maternal and neonatal complications.

Inclusion criteria

- Singleton term breech (complete or frank).
- In Spontaneous labour
- Clinically adequate pelvis
- Estimated fetal weight <3.5kg

Exclusion criteria

- Geatational age <37 weeks and >41weeks.
- Previous caesarean section
- Contracted pelvis.
- Estimated fetal weight >3.5kg
- Footling presentation.
- IUGR.
- Hyperextended fetal head.
- Obstetric and medical complications.
- PROM
- Multiple pregnancy.
- Antepartum IUD.

Method

Complete history, general physical examination detailed obstetric examination and labour details of 100 Term breech patients fullfilling the inclusion criteria was analysed. Maternal factors recorded include maternal age, gestational age, mode of delivery (assisted breech delivery), perineal trauma. Neonal factors that were analysed include apgar score of neonate at 5 mins, weight of baby, neonatal injuries (if any).

The data thus collected analysed statiscally.

Results

There were total of 5975 deliveries during the year 2015, Of which there were 186 vaginal breech delivery (incidence is 3.11%). 100cases

were analysed retrospectively for the study. All were unbooked cases, 90% of were multigravidae and 10% were primi, most between 21 to 30 years of age. Gesrtational age of Most of the women who delivered vaginally were between 39-40 weeks. The mean birth weight was 2.75kg.

Ninety one percentage of the babies that were born had an APGAR SCORE of >/8 and 5% had < 8. There were 5 still births and 2 neonatal deaths. None of the babies had Birth trauma. Maternal genital tract trauma was seen in 4%. 1 lateral vaginal wall tear, 2 cervical tears, 1 had third degree perineal tear.

Table 1: Gravidity

GRAVIDITY	No. of Cases(n)	PERCENTAGE(%)
Primigravidae	10	10
Multigravidae	90	90

Table: 2- Age distribution

Maternal age (years)	No. of cases(n)	Percentage%
<20	7	7
21-25	35	35
26-30	35	35
31-35	22	22

Table 3: Gestational Age in weeks

GA in weeks	No. of cases(n)	Percentage%
38-39	39	39
39-40	54	54
40-41	7	7

Table 4. Birth weight in kgs

Birth weight in kg	No of cases(n)	Percentage%
<2.5	14	14
2.5-3	62	62
3.1-3.5 kg	24	24

Table 5: Neonatal outcome.

APGAR SCORE at 5minutes

Apgar score at 5min	No of cases	Percentage%
0	5	5
4	2	2
6	2	2
8	91	91

Discussion

Incidence of breech delivery in our study was 3.1% , which is comparable to Ile-Ife [3] and Ilesha[2] studies but incidence is more as compared to sokoto[4] study(1.7%) and calabar [1] studies (1.4%). Mean age group was 21-30 years in our study which is in comparasion with sokoto [4] study which is 26.9 years. Fawole[6] and Usmanu Sokoto[4] studies reported incidence of breech presentation more among primigravida but in our study incidence of breech is more among multigravida (90%) which is comparable to Abasiattai AM[1], Aisien AO [5] studies. In our study there were 5 / 100 perinatal mortality where as in sokoto [4] study it was 410/1000 deliveries, still perinatal mortality can be reduced if patients come well in advance and if they undergo a planned vaginal delivery .In our study Apgar at 5 minute was > 7 in 91 % cases where as only 44.3% cases had apgar >7 in sokoto[4] study. In our study averagebirth weight was 2.75 kg which is comparable to Isha Gutgutia study (2.58 kg).In 2006, the RCOG and ACOG replaced their restrictive 2001 breech guidelines with new versions supportive of selected vaginal breech birth.[8,9] Outcome of our study well supports the Society of Obstetricians and Gynecologists of Canada (SOGC) revised recommendations 2009[10] which stated “Planned vaginal delivery is reasonable in selected women with a term singleton breech fetus and careful case selection and labor management in a modern obstetrical setting may achieve a level of safety similar to elective Caesarean section”. Y Berhan analysis [16] has also shown that the AR of birth traumain vaginal breech delivery was <1%, which was comparableto the AR of birth trauma in vaginal cephalic deliveries ofbabies who had shoulder dystocia, a birthweight >3.5 kgand instrumental delivery.[12-15]Hannah et al. found that planned CD for breech presentation did not reduce serious morbidity in newborns in high-PMR countries as much as in low-PMR countries. They recognized thepossibility of the caregivers being more experienced inbreech deliveries in the low-PMR countries, which traditionally have low CD rates[11]. The data reflected in our study have shown that with careful selection of patients, incidence of caesarean section can be reduced in breech presentation without increasing perinatal morbi-

dity and mortality Experienced obstetrician, care full assessment of events in labor careful feto-maternal assessment, monitoring of fetal well-being, experienced paediartician provides comparable fetal outcome by elective caesarean section

Conclusion

We conclude that in proper assessment of indivisual case and selection and in well managed cases the risk to the fetus is minimal following vaginal breech delivery. Offering a trial of vaginal breech delivery to selected and well counselled women is an appropriate option without compromising perinatal and maternal outcome. Thus contributing in decreasing the rising caesarean section rate.

Implication

Experienced obstetrician, care full assessment of events in labor careful feto-maternal assessment, monitoring of fetal well-being, experienced paediartician provides comparable fetal outcome by elective caesarean section . For vaginal breech delivery to guide best practice it is necessary to set eligibility criteria at the national level. A comparative study on vaginal cephalic and vaginal breech delivery & with comparision caesarean section for breech is recommended.

References

1. Abasiattai AM, Etuk SJ, Asuquo EJ, Ikiaki CO. Perinatal outcome following singleton vaginal breech delivery in the University of Calabar Teaching Hospital, Calabar. A 10-year review. Mary Slessor J Med 2004;4:81-5.
2. Fasubaa OB, Kuti O, Orji EO Ogunlola O, Shittu S. Outcome of singleton breech delivery in Wesley Guild Hospital Ilesha Nigeria. Trop J Obstet Gynaecol 2003;20:59-62.
3. Shittu SA, Fasubaa OB, Dare FO, Ogunniyi OS. Five year review of breech presentation at Ile-Ife Nigeria. Trop J Obstet Gynaecol 2001;18:36.
4. Tunau K, Ahmed Y. Breech deliveries in Usmanu Danfodiyo University Teaching Hospital Sokoto, Northwestern Nigeria: A 10-year review. Sahel Med J 2013;16:52-5.
5. Aisien AO, Lawson O. Outcome of term singleton breech deliveries in a tertiary health care centre. Trop . Obstet Gynaecol 2003;20:121-33.
6. Fawole A, Adeyemi AS, Adewole IF, Omigbodun AO. A Ten year review of breech deliveries in Ibadan. Afri J Med Sci 2001;30 87-90.
7. Gutgutia I, Gupta M, Das B. Vaginal delivery for breech presentation should be an option: experience in a tertiary care hospital. Int J Reprod Contracept Obstet Gynecol 2014;3:562-5.
8. American College of Obstetricians and Gynecologists. ACOG Committee Opinion No. 340. Mode of term singleton breech delivery. Obstet Gynaecol. 2006;108(1): 235-7.
9. Royal College of Obstetricians and Gynaecologists. The management of breech presentation. In RCOG, eds. RCOG Green Top Guidelines. Guideline no. 20b. London: RCOG; 2006: 1-13.
10. Kotaska A, Menticoglou S, Gagnon R, The Maternal-Fetal Medicine Committee of the Society of Obstetricians and Gynaecologists of Canada. Vaginal delivery of breech presentation. SOGC Clinical Practice Guideline No. 226, June 2009. J Obstet Gynaecol Can. 2009;31:557-66.
11. Hannah ME, Hannah WJ, Hewson SA, Hodnett ED, Saigal S, Willan AR. Planned caesarean section versus planned vaginal birth for breech presentation at term: a randomised multicentre trial. Term Breech Trial Collaborative Group. Lancet. 2000;356(9239):1375–83.
12. Levine MG, Holroyde J, Woods JR Jr, Siddiqi TA, Scott M, Miodovnik M. Birth

trauma: incidence and predisposing factors. Obstet Gynecol 1984;63:792–5.

13. Iffy L, Varadi V, Papp Z. Epidemiologic aspects of shoulder dystociarelated neurological birth injuries. Arch Gynecol Obstet 2015;291:769–77.
14. Berhan Y, Kassie A. Extracranial hemorrhage in babies admitted to neonatal unit over a 10-year period. Ethiop J Health Dev 2004;18:190–8.
15. Hankins GD, Clark SM, Munn MB. Cesarean section on request at 39 weeks: impact on shoulder dystocia, fetal trauma, neonatal encephalopathy, and intrauterine fetal demise. Semin Perinatal 2006;30: 276–87.
16. Y Berhan,a A Haileamlakb The risks of planned vaginal breech delivery versus planned caesarean section for termbreech birth: a meta-analysis including observational studies Accepted 19 May 2015. Published Online 29 July 2015.