

Case Report

Obstetrician's Distress in an Unusually Delayed Vaginal Delivery of Second Twin : A Case Report

Shilpa Kshirsagar¹, Prachi Dwivedi², Charmy Vashi³, Shankar Burute⁴

Abstract

Background : We report a case of vaginal delivery of both twins with a delay of almost an hour after the first twin delivery of a woman in her 20s with second gravida abortion one at 38 weeks gestational age. The case was of a dichorionic diamniotic twins with labour pains in a case of infertility conceived with ovulation induction. Patient had uneventful antenatal period and presented to labour room in latent labour with first fetus in cephalic presentation and second with breech. Labour was augmented with oxytocin and vaginal delivery was achieved successfully for the first female baby with a birth weight of 2.70 kg and APGAR (Appearance, Pulse, Grimace, Activity and Respiration) score of 9/10. After delivery of the first twin, adequate contractions were not achieved even after the maximal dose of oxytocin infusion (8 units in 500 mL Ringer's lactate solution at 60 dpm). ARM was done at very high station keeping everything ready for emergency LSCS. Continuous monitoring of fetal heart rate and vital parameters of mother was performed with utmost patience expecting vaginal delivery. A healthy male child of 3.0 kg was delivered vaginally in vertex presentation after more than an hour of the first twin with an APGAR score of 8/10. The mother was shifted to the ward and both babies on the mother's side was the happy end of our battle.

Key words : Twins, Vaginal Delivery, ARM, Oxytocin, APGAR Score.

In India, the reported incidence of twins was found to be 30.5 per 1000 deliveries and this is due to the use of assisted reproductive techniques and pregnancy at advanced age¹.

Due to a lack of prospective studies to choose the best mode of delivery on the basis of individual case characteristics, on one hand, expertise in the management of vaginal twin delivery is mandatory and on the other hand some obstetricians prefer caesarean section delivery for good perinatal outcomes in twin pregnancies at ≥ 36 weeks gestation.²

Herein we aimed to report a case of vaginal delivery of healthy twins with a delay of more than an hour in delivery of second twin after the first twin delivery at term which is a rare event.

CASE REPORT

It's a case of registered second gravida with previous one abortion at 38 weeks of gestational age with dichorionic diamniotic twins. She presented to us in latent labour. She had conceived after ovulation induction done for 4 years

Department of Obstetrics and Gynaecology, Dr D Y Patil Medical College, Pimpri, Pune, Maharashtra 411018

¹MBBS, DNB (Obstetrics & Gynaecol), Associate Professor

²MBBS, Junior Resident and Corresponding Author

³MBBS, MS, Senior Resident

⁴MBBS, MS, Professor

Received on : 28/12/2023

Accepted on : 09/01/2024

Editor's Comment :

- Do not rush for cesarean, if second twin takes more time to deliver.
- If found clinically normal, outcome will be good even in delayed vaginal delivery.

infertility. Her antenatal period was uneventful and latest ultrasound examination done at 35 weeks of pregnancy revealed she was having two fetuses of average gestational age of 35 weeks with adequate liquor. She was admitted and CTGs of both fetuses were reactive, hence proceeded with vaginal trial with necessary consents. Labour was augmented with ARM followed by oxytocin in view of slow progress noted by plotting partograph. On full dilatation, patient was shifted to the OT for further smooth management considering breech presentation of second twin. Vigilant monitoring of the patient's pulse rate, contractions and continuous fetal heart rate monitoring by Cardiotocography (CTG) was done. A healthy female child of 2.70 kg was delivered vaginally in vertex presentation at 11:28 PM. The baby cried immediately after birth with an APGAR (Appearance, Pulse, Grimace, Activity, and Respiration) score of 9/10.

After delivery of the first twin, the lie was kept stable abdominally, longitudinally, and fetus was noted in vertex presentation. The cervix was 7-8 cm dilated with high station and no contractions. Labour augmentation was continued with oxytocin infusion. However, at a maximal dose (8 units in 500 mL Ringer's lactate solution at 60 dpm) adequate contractions could not be achieved. Continuous monitoring of fetal heart rate and patient's vitals was done. Decision for ARM was made as oxytocin

How to cite this article : Obstetrician's Distress in an Unusually Delayed Vaginal Delivery of Second Twin : A Case Report. Kshirsagar S, Dwivedi P, Vashi C, Burute S. *J Indian Med Assoc* 2025; **123(11)**: 69-70.

could not give optimum results in augmenting contractions. Controlled ARM was done keeping everything ready for emergency LSCS, clear liquor was drained. Eventually after ARM, uterine contractions started and also response to oxytocin infusion was noted. A healthy male child of 3 kg was delivered in vertex presentation at 12:33 AM almost an hour after delivery of the first twin. The baby cried immediately after birth, and the APGAR score was 8/10.

The placenta and membranes were delivered spontaneously and completely. Episiotomy sutured in all layers; haemostasis achieved. No tear and no postpartum haemorrhage was noted. The patient was shifted to the ward with both babies' mother's side.

DISCUSSION

The findings from this case study depicted that the second twin weighing 3.0 kg was delivered successfully vaginally after a delay of more than an hour after the delivery of the first twin with an APGAR score of 8/10. Generally, planned caesarean section delivery is recommended in twin pregnancy, when the pregnancy is an assisted one and the woman aged greater than 40 years^{3,4}. Furthermore, Dong *et al.*, with a large sample size reported that planned caesarean section lowers the risk of serious neonatal morbidity, in particular of the second twin. Notably, it favours planned caesarean at gestational week $\geq 36^2$.

Contradictorily some clinicians expressed that the decision on the mode of delivery should be made on the basis of the comprehensive condition of the mother, rather than being biased by the fact that the pregnancy is a precious one. A commonly accepted view is that the interval between the birth of the first and second twins should be preferably within 15 minutes and certainly not more than 30 minutes.⁵ In contrast with literature findings, in our case study, a successful vaginal delivery was achieved almost after an hour after the first twin delivery alongside continuous monitoring of the fetal heart rate and vital parameters of the mother. Rayburn *et al* revealed that if there is continuous fetal and uterine monitoring, a time restriction for the delivery interval between the first and second infants is not necessary⁶. As per Stein *et al*, some of the factors responsible for a longer twin-to-twin delivery time interval are as follows; breech, transverse lie, birth

weight discordance with the second twin at least 20% larger, fetal distress, and vaginal operative delivery⁷. Lindross *et al*, demonstrated in their study that an association, but not necessarily a causality, between twin-to-twin delivery interval and composite outcome of metabolic acidosis was seen⁸.

CONCLUSION

The second twin delivery was successfully achieved through vaginal delivery after an hour after the first twin delivery providing continuous monitoring of the fetal heart rate and vital parameters of the mother. When all the parameters are normal, we still recommend to go ahead with vaginal trial since twin pregnancy and delay of second twin ≥ 30 mins are not always indications for caesarean section.

Funding : None.

Conflict of Interest : None.

REFERENCES

- 1 Kumar RK, Usha BR — Multiple pregnancy: boon or bane—an Indian perspective; 2022.
- 2 Dong Y, Luo ZC, Yang ZJ, Chen L, Guo YN, Branch W, *et al* — Is cesarean delivery preferable in twin pregnancies at ≥ 36 weeks gestation? *PLOS ONE* 2016; **11(5)**: e0155692.
- 3 Jonsson M — Induction of twin pregnancy and the risk of caesarean delivery: a cohort study. *BMC Pregnancy Childbirth* 2015; **15**: 136.
- 4 Hofmeyr GJ, Barrett JF, Crowther CA — Planned caesarean section for women with a twin pregnancy. *Cochrane Database Syst Rev* 2015; 2019(5).
- 5 Sinha P, Joseph O, Hakmi A — Optimum time interval for intertwin delivery for extreme prematurity in DCDA twin pregnancy. A case report and a literature review. *HJOG* 2018; **17(4)**: 91-7.
- 6 Rayburn WF, Lavin Jr JP, Miodovnik ME, Varner MW — Multiple gestation: time interval between delivery of the first and second twins. *Obstet Gynecol* 1984; **63(4)**: 502-6..
- 7 Stein W, Misselwitz B, Schmidt S — Twin to twin delivery time interval: influencing factors and effect on the short term outcome of the second twin. *Acta Obstet Gynecol Scand* 2008; **87(3)**: 346-53.
- 8 Lindroos L, Elfvin A, Ladfors L, Wennerholm UB — The effect of twin-to-twin delivery time intervals on neonatal outcome for second twins. *BMC Pregnancy Childbirth* 2018; **18(1)**: 36.