



Vaginal Delivery of an Undiagnosed Preterm Twin in an Unbooked Case: A Case Report

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Submitted: 30-07-2021

Revised: 05-08-2021

Accepted: 08-08-2021

ABSTRACT

The development of two or more fetuses simultaneously in a pregnant uterus is called multiple pregnancy. Simultaneous development of two fetuses is called twin pregnancy and is the most common variety of multifetal pregnancy. Twin pregnancy is considered a high risk pregnancy. Maternal mortality increases (3-7 times) in multiple pregnancy and perinatal mortality increases markedly (3-11 times) than singleton pregnancy. Hence, early registration and diagnosis is the key to decrease the risk associated with it.

Here, we describe the unbooked case of a woman, who presented at 30 weeks of pregnancy with pain abdomen with undiagnosed twins. The objective of this case report is to highlight the importance of early registration and diagnosis of all pregnancies so that high risk pregnancies can be diagnosed and managed well in time and which could also help in thorough evaluation and active management.

Keywords: complications, delivery, high risk, preterm, twins

I. INTRODUCTION:

Multiple pregnancies can be twins (two fetuses), triplets (three fetuses), quadruplets (four fetuses), quintuplets (five fetuses), sextuplets (six fetuses) and so on. Twins, which are the most common type of multiple pregnancy are of two types:

Dizygotic twins or fraternal twins which results from fertilisation of two ova by two sperms. The babies bear only fraternal resemblance to each other. It is the most common variety and nearly two-thirds (67%) of all twins are dizygotic. Other is monozygotic or identical twins, which results from fertilisation of a single ovum by a single sperm and occurs in 1/3rd of all twin pregnancies.

Multiple pregnancies are associated with adverse maternal outcomes including increased rates of pre-eclampsia, pregnancy induced hypertension, maternal anemia and venous thromboembolism.

Overall, the goal of a twin delivery is to provide a safe delivery for the mother and both

babies. With regard to mode of delivery, there are 3 potential outcomes: vaginal delivery of both twins, caesarean delivery of both twins and vaginal delivery of twin A followed by caesarean delivery of twin B (combined vaginal-caesarean)

II. CASE REPORT

This case was reported and analysed in OBG department of Jamnabai General Hospital, Vadodara, Gujarat, India.

Mrs XY, 34 years old, rural geographic origin, the patient had no previous history of multiple pregnancies in the family, gravid 4, para 3, live 3. She had all three previous full term vaginal home deliveries all of which were uneventful. G4 is the current pregnancy estimated at 30 weeks given by her last menstrual period. She was not registered at any healthcare facility, no antenatal checkups till date, no history of folic acid in periconceptional period or in 1st trimester, no history of iron and calcium supplements, no history of injection tetanus toxoid, no routine antenatal blood tests including ultrasonography in any trimester. She presented in emergency with approximately 30 weeks as per her LMP with complaints of pain abdomen. There was no significant past, obstetric or surgical history. On general examination, the patient was clinically stable, height 148cm, weight 63kg, pallor was present, edema of lower limbs present, blood pressure 110/70mmhg, pulse rate 98bpm, Spo2 98% and temperature 36.7C. Obstetric examination: persistent uterine contractions present, 34cm uterine height, fundal height 36 weeks, abdomen was unduly enlarged, fetal heart rate was 142bpm, liquor seemed clinically on higher side evidenced by tensed abdomen and unable to identify the presenting part. So, considering it to be case of either polyhydramnios or wrong dates or both, per vaginal examination was done and cervix was found to be 7cm dilated with full effacement, intact membranes with vertex presentation.

All the necessary emergency antenatal investigations were done. All parameters were normal except Hb of 7 gm. A high risk consent in view of non-availability of ultrasonography was



taken. Patient was reassessed after 30 mins followed by delivery of the female baby weighing 1.74kg, on repeat vaginal examination, a second sac was felt which was ruptured and followed by delivery of a second female baby by cephalic weighing 1.36kg. Both had an apgar score of 6 at 1 min and 8 and 9 at 5 mins respectively. After informing the nature of pregnancy i.e twin pregnancy and after explaining the prognosis of the preterm neonates and high risk of complications associated with twin pregnancies to the patient and her relatives, an informed and written consent was taken. As both the babies were preterm they were admitted in NICU for observation and further management. As there were 2 separate sacs and 2 separate placentae, it was labelled as a case of dizygotic (dichorionic diamniotic) twin delivery.



Fig 1: Twin babies (dizygotic, diamniotic, dichorionic) (pic. put after permission from the parents)



Fig 2: two cords from different sacs (pic. put after permission from the parents)

Patient had a bout of atonic PPH which was managed by active management of third stage of labour and by blood transfusion as she was

already anemic. She was strictly monitored during the 1st two hours of delivery in view of high risk associated with high parity and high order pregnancy. After delivery, she was thoroughly investigated for anemia and managed accordingly. Both the babies were admitted in NICU for a period of 10 days for Low birth weight and poor sucking and were discharged on the 10th day after normal weight gain was observed and sucking improved.

III. DISCUSSION

Twin pregnancies (dizygotic) occur more commonly in women with high parity (especially para 5 and above) and rising maternal age peak at 37 years due to maximum FSH levels leading to double ovulation. Our patient was 34 years old and para 4 which could be the reason of multiple pregnancy in her case.

The percentage of singletons born less than 37 weeks of gestation was 11.1% compared to 61.9% for multiples. The rate of preterm birth less than 32 weeks of gestation was much more common among multiple pregnancies than among singletons 13.3 versus 1.6%¹ a recently published, randomised, controlled study showed an increase in the rate of preterm birth < 32 weeks in symptomatic twins with short cervix who received IM synthetic progesterone injection² a Cochrane review of randomised trials studying the effect of hospital bed rest in multiple pregnancies found no evidence that this practice should be applied to all multiple pregnancies and should not be recommended for routine clinical practice³. In twins, there is no evidence that selective B₂ agonists prevent preterm birth. A Cochrane review on the use of oral betamimetics for reducing preterm birth in twins showed insufficient evidence to support or refute the use of prophylactic oral betamimetics⁴. Magnesium sulphate has been classed as one of the three most effective drugs for delay of delivery for 48hrs⁵ and its effectiveness was similar for singleton and twins⁶. In singleton and multiple gestations, the role of tocolysis in the setting of acute preterm labour is to attempt to delay delivery long enough to administer corticosteroids to promote fetal lung maturity⁷. WHO is currently coordinating two clinical trials, called the WHO ACTION Trials (antenatal corticosteroids for improving Outcomes in preterm Newborns) for women at risk of preterm birth by:

1. Immediate kangaroo mother care (KMC) multicountry trial (compared with the current recommendations of initiating KMC when baby is stable) in Ghana, India, Malawi, Nigeria and the United Republic of Tanzania.



2. Implementation research to scale-up KMC in India and Ethiopia.

IV. CONCLUSION

Preterm birth is a major increasing health problem, especially with twins. Although the prediction of preterm birth is possible in twins by Transvaginal ultrasound cervix measurement and possibly measurement of fetal fibronectin, no effective preventive or treatment measure is available for management of preterm birth in twins. Management should involve decreasing the number of twins resulting from ART procedures, such as single embryo transfer and careful monitoring of ovulation induction. The complications related to multiple pregnancy can be avoided or minimised by early diagnosis and management. In our case, anemia and postpartum hemorrhage was a direct consequence of multiple pregnancy as well as the preterm delivery and its complications. So, it should be emphasized upon antenatal patients to do early registration and booking of pregnancy so the complications can be managed well in time and preparations could be done to tackle its consequences so that both perinatal morbidity and maternal morbidity and mortality could be minimized.

Compliance with ethical standards:

Conflict of interest: the authors declare that they have no conflict of interest

Informed consent: informed consent was obtained from the couple for the case report and assurance was given to maintain their privacy.

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