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A Case Study of a Delayed Delivery of the Second Twin Following Viable Delivery of the First Twin in Asmara –Eritrea

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Abstract

In multiple gestation, premature delivery is common. The incidence of twin and higher-order multiple gestations has increased significantly over the past 15 years primarily because of the availability and increased use of ovulation-inducing drugs and assisted reproductive technology which are the independent risk factors for premature delivery. Delayed delivery of multiple gestations with survival of the remaining twin to viable gestation is rare. In this case report the delivery of the second twin was prolonged by 36 days. Patient was managed conservatively with no use of pharmaceutical treatment and fortunately it ended up with good outcome of both the mother and her baby. However, more studies and management protocols may be required for obstetrics practitioners in the main time.

Keywords

Multifetal gestation, delay of birth of second baby

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I. Introduction

Multifetal gestation is one of the main risk factors of abortion, preterm delivery, congenital abnormalities and low birth weight. The incidence of preterm delivery in multifetal gestation is as high as 50% [1].Obstetric documents mention that survival of delayed delivery of second twin is very rare. In less than 1% of twins labor results in delivery at a previable gestation [2]. This case report is one of the successful experience of the author1's clinical practice in maternal (Obstetrics and midwifery) health care services where viable delivery of the first twin was followed by 36 days prolongation of pregnancy resulting to a spontaneous alive baby and a healthy mother. The client did not have any antenatal care during her pregnancy. After spontaneous delivery to a small alive infant at home, she realized the size of her abdomen remained big. Patient also felt fetal movement. Despite her expectation, labor did not commence. Twenty four hours after the delivery of the first twin, her family members and her traditional birth attendant suggested that she should go to hospital for the further management, which she subsequently did.

II. Case Study

A 27 year old woman with history of early rupture of membranes followed by spontaneous vaginal delivery to a small alive infant (who died few hours after delivery) 28 hours ago at home presented to the maternity hospital. The mother had history of two live term deliveries with no history of abortion or contraception. She stated that her last menstrual period was seven months and four days ago and the size of her abdomen was big compared to her previous pregnancies. She never utilized the health facility for antenatal care service. There was a family history of twin delivery. She walked to the examination room. On assessment she was in stable condition. Vital signs were within normal parameters. On abdominal palpation following findings were noticed; gestational age (fundal height) 26-28 weeks, longitudinal lie, cephalic presentation, fetal heart beat rate 132/minute regular; and there was no contraction.
Umbilical cord of the delivered first twin was at the vulva tied with local made cotton thread and attached to the mother's right thigh. Clean cord was there about 20 centimeters long with no bleeding observed. On speculum examination following findings were noticed; vagina wet, coiled umbilical cord in the vaginal canal protruding through the closed os. Cervical effacement was about 50 %.

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Umbilical cord was ligated and cut at the level of the external os under strict infection prevention procedure. Antibiotics and Iron tablets were started. Mother was reassured and transferred to the ward for rest and follow up. Vital signs were checked four hourly and fetal heart beat was auscultated twice per day and recorded.

Abdominal palpation to assess fetal well-being was performed weekly. Treatment and close nursing care continued. Laboratory investigations such as complete blood cell count, Clotting time, hemoglobin as well as blood grouping and Rh factor were carried out. Urine for albumin, sugar and microscopic analysis was also obtained. All results were within normal ranges. Ten days after admission speculum examination was performed to view the cervix and umbilical cord stump. There were neither signs of labor nor signs of infection. Patient was ambulating around the maternity ward.

35 days after admission at 30 -32 weeks of gestation painful uterine contractions started. Membranes ruptured in the second stage of labor. Labor was progressive and had spontaneous vaginal delivery to a second twin, male infant weighing 2.2 kilograms. Apgar score was 8 and 10 at one and five minutes respectively. Placenta was delivered by fundal pressure and maternal effort 20 minutes later (one). Bleeding was normal. Routine treatment and care was provided. Mother was discharged home with her neonate after 14 days.

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III. DISCUSSION

In multiple gestations, premature delivery is common. The incidence of twin and higher-order multiple gestations has increased significantly over the past 15 years primarily because of the availability and increased use of ovulation-inducing drugs and assisted reproductive technology which are the independent risk factors for premature delivery [3]. It has been reported that mother with twin pregnancy was managed who gave birth to first twin at previable stage followed by a viable baby after 49 days thus indicating delayed delivery of the second twin [1].

After delivery of one fetus it may be advantageous for the undelivered fetus to remain within the uterus but there must be careful evaluation for infection, abruption and congenital anomalies [3]. In this case report, the management included daily monitoring of patient's vital signs, assessment of fundal height increment, weekly weight, fetal heart beat auscultation and avoidance of unnecessary vaginal examinations. Prior to delivery of second twin complications including pre-term labor, uterine contractile dysfunction, abnormal presentation, prolapse of the umbilical cord, premature separation of the placenta and immediate postpartum hemorrhage are encountered more often with multiple fetuses than with singleton [3]. Literatures reviewed also describe the use of tocolytic therapy to prolong pregnancy of the retained twin that has been successful to extend gestation by 48 hours so that the effects of steroids can be realized. Many authors state, the use of repeat ultrasound examination to assess fetal well-being and development, condition of the placenta (one or more placentae), amount of amniotic fluid, cervical dilatation and length as well as fetal presentation and detection of any abnormalities are routine follow up procedures while managing delayed delivery of second twin [4,5,6].

In this case report however, ultrasound machine was not available for various reasons. Thus, the patient's management was conservative such as bed rest, provision of antibiotics and supporting drugs (iron and vitamin) and diet. While doing vital signs monitoring, assessment of vaginal discharge's (color, amount and odor), and providing close maternal follow up, none of the above mentioned complications were observed.

The presented case had 36 days delay in delivery of the second twin and it was the first case of its kind in this hospital. With above-mentioned conservative management, outcome of the mother and baby was successful despite the shortage of ultrasound machine to assess fetal well-being and cervical conditions.

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IV. CONCLUSION

Delayed birth of the second twin seem to be advantageous as the fetus increases in age, weight and physical development which are good indicators for survival after birth. However, health care providers' up dated management procedures (guidelines) are very important especially in areas with poor resource.

V. References

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