IDENTICAL TWIN PRIMIGRAVID SISTERS -SPONTANEOUS LABOUR AND DELIVERY ON THE SAME DAY: A CASE REPORT

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ABSTRACT

We report 2 cases of identical twin sisters, the older sibling getting married 14 months earlier but both got pregnant for their first child at about the same time and were managed by the same Obstetrician and fell into spontaneous labour within a few hours of each other. Both were delivered by emergency caesarean section on the same day. The chances of twin sisters delivering on the same day is very rare with the odds being 400,000 to 1 .This is the first time this has been reported in Nigeria, a country with one of the highest twining rates in the world amongst its southwestern population.

Keywords: Identical, twins, primigravid, spontaneous labour.

INTRODUCTION

Twins have been the object of great interest and fascination as well as intensive enquiry since ancient times [1]. Globally, the highest burden of multiple births has been found in sub-Saharan Africa, with an average rate of 20 per 1,000 deliveries to 10 per 1,000 deliveries in Europe or around 5-6 per 1000 deliveries in Asia [2]. Twin pregnancies are very common in our environment with increasing risks to both mother and child. The high incidence in our environment is well documented [1, 2, 3]. An incidence of 32.3 per 1000 has been reported in our centre [3] which is similar to other studies in Nigeria.

Twin sisters have been known to be brought up and do things together, attend same schools and get married on the same day. Having twin sisters being pregnant at the same time is known to occur, but having primigravid identical twins go into labour and deliver on the same day is very rare and only a few cases have been reported in the Caucasian population but not amongst the African or Nigerian population. The odds of twin sisters giving birth on the same day are 400,000 to 1[4].

We report the case of twin sisters who did not get married at the same time but got pregnant for their first child at about the same time and were managed by the same Obstetrician and fell into spontaneous labour within a few hours of each other and delivered on the same day.

CASE SUMMARY

Case 1: Twin I was a 28 year old primigravida who presented at the booking clinic of the University College Hospital, Ibadan on the 23rd of May 2012. Her last menstrual period was on the 29th of March 2012 and her expected date of delivery was the 5th of January 2013. Her gestational age at booking was 7 weeks and 6

days. She had a right breast lump excision in 2005. She got married in November 2010 and had primary infertility but did not seek medical treatment. She was the first of a set of identical twin sisters and they were the 4th and 5th children of their parents 6 children. She was not hypertensive or diabetic. General examination was unremarkable. Her height was 1.59 meters, weight 55 kilograms and blood pressure 100/70mmHg. Her uterus was not palpable per abdomen. Investigations done at booking revealed her genotype to be AA, blood group B Rhesus Positive, VDRL and Retroviral screening were both non reactive. Urinalysis revealed no albumin or glucose in her urine and her packed cell volume was 36%.

Pelvic ultrasound done at 9 weeks gestation showed a singleton live fetus compatible with her date. Pregnancy was uneventful and she had 2 doses of tetanus toxoid and intermittent preventive treatment for malaria at 19 and 23 weeks respectively. Repeat ultrasound scans done at 15, 24 and 34 weeks were normal and her antenatal packed cell volume ranged between 32 and 36%.

At 8pm on the 13th of December 2012 she presented to the labour ward with a 5 hours history of labour pains at a gestational age of 36 weeks and 5 days. She had seen show but had not drained liquor. She had 2 palpable moderately strong uterine contractions in 10 minutes and there was a singleton fetus, longitudinal lie, cephalic presentation in the right occipito-anterior position with the head not engaged. The fetal heart rate was 136 beats per minute. On vaginal examination the cervix was closed and uneffaced. A diagnosis of latent phase of labour was made and she had a single dose of intramuscular pentazocine and the contractions subsided. Her packed cell volume was 34%.

The next day at 10am she was noticed to have recommenced uterine contractions. She was having 2 strong contractions in 10 minutes. Vaginal examination revealed a cervical dilatation of 5cm and a fully effaced cervix. A diagnosis of active phase of labour was made and she was allowed to progress in labour. Two hours later (at 12 noon) she was still having 2 strong contractions in 10 minutes with no cervical changes. Augmentation of labour was commenced with intravenous oxytocin and at 2pm she was having 3 strong contractions in 10 minutes and was now 8cm dilated. At 3.30pm she was still having adequate contractions but the fetal heart rate ranged between 164 and 176 beats per minute with no cervical changes. A diagnosis of fetal tachycardia was made and the augmentation of labour was discontinued. Resuscitation was commenced and the patient was placed in the left lateral position, administered intranasal oxygen and intravenous fluid was changed to normal saline. The fetal heart rate remained between 172 – 180 beats per minute with no cervical changes and she had now developed features of cephalo-pelvic disproportion. She was counseled on the need for an emergency caesarean section due to persistent fetal tachycardia and cephalo-pelvic disproportion.

She had an emergency lower segment caesarean section and was delivered of a live female infant in direct occipito-posterior position, with a birth weight of 2.55 kilograms and Apgar scores of 8 and 9 at 1 and 5 minutes respectively at 4.55pm. The estimated blood loss at surgery was 350mls. The post operative period was uneventful with a post operative packed cell volume of 29% .She and her baby were discharged home on the 3rd day post surgery.

Case 2: Twin II was a 28 year old primigravida

who presented for booking on the same day with her twin sister. Her last menstrual period was on the 27th of March 2012 and her expected date of delivery was the 3rd of January 2013.Her gestational age at booking was 8 weeks and a day. She got married in January 2012 and was the second of a set of identical twins. She was not hypertensive or diabetic.

General examination was unremarkable. Her height was 1.62 metres and weight 65 kilograms. The blood pressure was 110/70mmHg. Her uterus was not palpable per abdomen. Investigations done at booking showed her genotype to be AA, blood group B Rhesus positive and VDRL and retroviral screening were non reactive. Urinalysis revealed no albuminuria or glycosuria. Her packed cell volume was 38%. A pelvic ultrasound done at 9 weeks showed a singleton live fetus which was compatible with her gestational age.

She was admitted on the 24th of June 2012 for 5 days at a gestational age of 12 weeks and treated for hyperemesis gravidarum and malaria in pregnancy. Pregnancy thereafter was uneventful and she had 2 doses of tetanus toxoid and intermittent preventive treatment for malaria at 20 and 24 weeks respectively. Repeat ultrasound scans done at 15, 25 and 36 weeks were normal and her antenatal packed cell volume ranged between 30 and 35%.

At 6am on the 14th of December 2012 she presented to the labour ward with a 6 hours history of labour pains. She had seen show but had not drained liquor. She was 37 weeks and a day pregnant. On examination there was one palpable uterine contraction in 10 minutes and a singleton fetus in longitudinal lie and cephalic presentation in the right occipoto-anterior position. The fetal head was not engaged and the heart rate was 140 beats per minute. On pelvic examination the cervix was 2cm dilated and 50% effaced. An assessment of latent phase of labour was made. She had intramuscular pentazocine as analgesics. Her packed cell volume was 35%.

Four hours (10am) later she was noticed to be having 3 strong contractions in 10 minutes with no cervical changes. At 3pm labour was augmented with intravenous oxytocin on account of prolonged latent phase. Despite escalating the oxytocin and the patient having 4 strong uterine contractions in 10 minutes at 7pm there was cervical dystocia due to suspected cephalo-pelvic disproportion. Augmentation of labour was discontinued. She was counseled on the need for an emergency caesarean section which her husband did not consent to and the patient also declined further monitoring in labour.

She however later consented to caesarean section and was delivered of a live male infant with a birth weight of 3.2 kilograms, Apgar scores 9 and 10 at 1 and 5 minutes respectively with the fetal cord knotted once around the neck at 9.50pm. The estimated blood loss at surgery was 450mls.The post operative period was uneventful and she was discharged home with her baby on the 3rd day post surgery with a packed cell volume of 31%.

DISCUSSION

The 2 patients presented were 28 year old identical monozygotic twin sisters who worked in the same place but had different professions and according to their mother were born preterm and had to be kept warm for weeks following their birth. They were the 4th of her 5 pregnancies and are from the south western part of Nigeria a part of Nigeria with one of the highest twinning rates in the world [2, 3,6]. The older twin had primary

infertily for 16 months but did not seek medical help. She subsequently got pregnant about the same time as her sister. Commonly, twins seem to share an inherent understanding of their co-twin's emotional state [5].

Studies on twin pregnancy are uniquely important to Africa and particularly Nigeria where one of the highest incidences of twinning in the world exists [1,2,3,6]. Two cases of primigravid identical twin sisters getting pregnant at about the same time and delivering on the same day are presented. Few cases of this occurrence have been reported in the press or journals but this is the first time it has been known to have occured in Nigeria. It is also the first time that this has been known to occur with both sisters being delivered by caesarean section on the same day, in the same hospital and by the same obstetrician. The expected date of deliveries of both sisters was 2 days apart and yet they had preterm spontaneous labour and delivery. The elder twin presented in labour 10 hours before her sister. The elder sister delivered 5 hours earlier on the same day. This time interval may have been shortened if the younger twin had consented earlier to surgery.

One of the magical mysteries associated with twins and other multiples is that they share a special connection beyond that of ordinary siblings [5]. While the twin bond is a special aspect of their unique relationship, sometimes it is endowed with extraordinary supernatural qualities. There is plenty of anecdotal data to support this idea. Nearly every set of twins can relate a story. Sometimes, one twin experiences a physical sensation of something that is happening to their twin (such as labour pains or a heart attack) [5]. Other times they will find out that they perform similar actions when they are apart, such as buying the same item, ordering the same meal in a restaurant, or picking up the phone to make a call at the exact same moment. They may appear to know the other's thoughts, by speaking simultaneously or finishing each other's sentences. This phenomenon is called extrasensory perception (also known as ESP) and there is no scientific evidence to confirm the concept.

Though no scientific evidence confirms ESP, the phenomenon is assumed to be more common in monozygotic (identical) twins because they share a closer genetic connection, dizygotic or fraternal twins are not excluded [5].They also exhibit a deep connection also. Further studies possibly genetic studies need to be done to show if this really exists.

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