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Case Report Open Access

Term Pregnancy in a Case of Complete Bicornoute Uterus Presenting with Obstructed Labour: A Case Report

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Abstract

Major uterine malformations negatively impacts on outcome of pregnancy and in very severe cases there is impairment of menstrual function. Term pregnancy with live birth in women major malformations of the uterus is possible but may be associated with complications. A case report of a 30 year old woman G4P1+2, with history of one previous caesarean section who presented with a transverse lie and obstructed labour at 41 weeks plus 2 days in December 2013 is presented. She had an urgent caesarean section performed when she presented as emergency after absconding from an elective caesarean section at 39 weeks plus 2 days. A complete bicornuate uterus with normal tubes and ovaries were among the finding at caesarean section. The puerperium was normal for both mother and baby. It was a live birth at term from a pregnancy in a uterus with a major uterine malformation.

Successful pregnancies with live births at term in a complete bicornuate uterus after previous pregnancy losses are possible as seen in this case reported. However poor health seeking behavior and harmful practices during pregnancy and labour an in woman with major malformation of the uterus can result in serious maternal and fetal complications.

Keywords: Bicornuate uterus; Abnormal uterus; Transverse lie; Pregnancy in bicornuate uterus

Introduction

Majority of the uterine abnormalities are usually non obstructive and do not present with severe menstrual symptoms and may not be recognized during the adolescent period until pregnancy and childbirth begins [1-3]. The prevalence of uterine formation anomalies in the general population is estimated to be 1 in 250 women, 6.9% and 10% respectively in women with recurrent pregnancy loss or abnormal uterine bleeding [4-7]. Minor abnormalities have little or no effect on pregnancy outcomes but major fusion abnormalities such as complete bicornuate uterus in which the uterine cavity is duplicated and non-communicating up to the isthmus in a non-pregnant state would adversely impact on the course of pregnancy and labour in affected women. This is a case report of a second successful term pregnancy in a woman with a complete bicornuate uterus who presented with obstructed labour and had an urgent caesarean section. Though the risk of recurrent pregnancy loss in a complete bicornuate uterus is high, successful pregnancies with life birth at term is still possible as seen in this case report. Literature on pregnancy in an abnormal uterus is still limited in West Africa, it is hoped that this case report will add to existing publications.

Case Report

A 30 year old gravida 4, Para 1 plus 2 spontaneous abortions at 16 and 18 weeks reported to our maternity with history of labour lasting over 12 hours in December 2013 at gestational age of 41 weeks plus 2 days using a second trimester scan. She had experienced intermittent contractions a day before her presentation but labour failed to establish until the morning of day of presentation after she had taken some herbal utero-tonic to augment her labour. Her contractions became more frequent and stronger towards the evening but she still could not deliver her baby, a situation which compelled her to come to the hospital for attention. Her membranes had not ruptured and there was no bleeding per vaginam and she could still perceive fetal movements at the time of presentation.

She had no dizziness, palpitations, headaches, dysuria, frequency or urgency. There was no past medical and family history of significance. She was a trader and lived with her husband who was a farmer in a suburb of the city, both had no formal education.

Her menarche was at 15 years with a regular monthly menstrual cycle. The menstrual flow lasted for 4 to 5 days and was usually with menorrhagia. She had some episodes of dysmenorrhea but had no dyspareunia or vaginal discharge. She denied knowledge of any problems associated with her reproductive system. Her first and second pregnancies resulted in spontaneous abortions at 16 and 18 weeks gestations respectively. She had a normal antenatal period during her third pregnancy which was carried to term five years ago. The baby was delivered by an elective caesarean section due to transverse lie in our department. The puerperium and 4 years period before onset of index pregnancy were normal with no history of usage of any modern method of contraception.

Her booking antenatal visit in the index pregnancy was during the second trimester at a small private health facility close to our hospital. Ultrasound scans together with other investigations were done during the second trimesters which were all normal. She visited the antenatal clinic seven times where she was attended to by midwives. At 39 weeks of gestation she reported to our hospital with an upper respiratory tract infection. Examinations of the other systems were normal but abdominal examinations showed a transverse lie of a single live fetus. No uterine contractions were noticed and there was no tenderness of the uterus. She was 1.6 m tall and weighed 50 kg. Both breasts and nipples were well developed and she looked well. Laboratory reports were normal when her antenatal records were reviewed. An

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ultrasound scan done during the second trimester showed a singleton live fetus with a transverse lie and a posterior wall placenta and an adequate liquor volume at a gestational age of 20 weeks. She was admitted to the maternity ward with a diagnosis of Transverse lie at term, with respiratory tract infection. She was given broad spectrum antibiotic treatment for her respiratory tract infection. Laboratory investigations were ordered together with 2 units of blood group "O" Rh^+ and an obstetric ultrasound to determine Placenta location. An elective Caesarean section was planned for her before discharge but she absconded from the maternity ward and did not return until she presented with obstructed labour two weeks later at 41 weeks plus 2 days.

She presented in labour one evening December 2013 as an obstetric emergency. Her blood pressure was 110/60 mmHg with a pulse rate of 84 beats per minute, regular with good volume. She was not febrile, pale or jaundiced with satisfactory hydration. The respiratory system was normal and abdominal examination confirmed a transverse lie. The uterine contractions were a minute apart and lasted more than 60 seconds. The fetal heart rate was 144 beats per minute by ultrasound. Vaginal examination showed a normal vulva and vagina. The cervix was 7 cm dilated, well effaced with intact membranes with shoulder and ribs presenting. A diagnosis of one previous caesarean section with transverse lie and obstructed labour was made after complete history and examination was done. Her haemoglobin level was 11.2 g/dl, and the urine was negative for proteins and ketones. An intravenous access was secured and resuscitation with intravenous fluids, intravenous broad spectrum antibiotics, antacids and analgesics were initiated. She was sent to the operating theatre after consenting for an urgent caesarean section when she was counseled and adequately prepared with two units of cross matched whole blood group "O" Rh^+ ready for transfusion.

A Pfannenstiel incision was made through the previous scar into the abdomen. The baby was delivered through a transverse incision in the lower uterine segment which was noticed to be grossly distended. A live male baby weighting 3.4 kg in dorso-inferior position was delivered by the breech. Complete bicornuate uterus with the placenta and breech in left uterus and the head in the right uterus. The common lower segment was being occupied by the trunk and the shoulders. The Apgar scores of the baby were 7/10 and 9/10 at 1 and 5 minutes respectively. Blood loss was approximately 600 ml and the placenta together with the membranes weighed 400 g. Each cornuate had a normal tube and an ovary and communicating with a single cervix and vagina below. The uterus and abdomen were closed in layers with absorbable sutures after delivery of the baby and placenta and assessing the findings at operation. The structure of the uterus and other operative findings are included in pictures 1-4 attached below. The third and fourth stages of labour were managed actively with a bolus dose of 10 iu of oxytocin and intravenous oxytocin 20 iu in 500 ml of infusion for the next four hours. She received adequate intravenous fluids and broad spectrum antibiotics in 48 hours after the operation and an adequate pain management for 5 days. Her postoperative recovery was satisfactory with normal vital signs, wound healing, lochia and involution of the uterus. She was discharged on the fifth day with a haemoglobin level of 10.1 g/dl. Baby was doing well during the postnatal visits and given the needed immunizations. She received counseling on the state of her uterus, the various contraceptive methods available and the expectations during the next pregnancy (Figures 1-4).

Figure 1: Dual cavity of complete biconuate uterus.

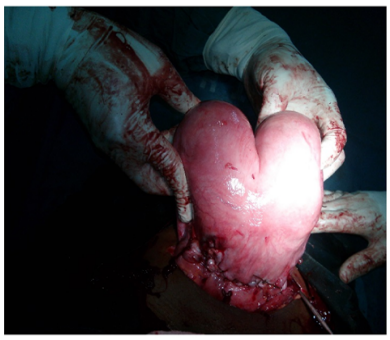

Figure 2: Y-shape of the complete biconuate uterus after closure of uterine incision.

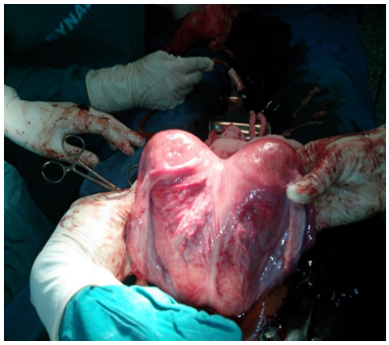

Figure 3: Back view of the biconuate uterus.

Discussion

In this case of complete bicornuate uterus, the pregnancy was carried to term for the second time in five years. She presented with a transverse lie, one previous caeserean section and obstructed labour which could have resulted in serious morbidity or even mortality for both the mother and baby. The complications that could have occurred were easily preventable with the right health seeking behavior and good understanding of factors that influenced reproductive outcome during previous pregnancies. A harmful practice of using herbal uterotonic with the aim of achieving vaginal delivery contributed significantly to the delay with possibilities of complications such as uterine rupture with high associated morbidity and mortality for both mother and fetus. Though there was easy access to health facilities, the opportunity to be delivered electively by caesarean section was squandered. She

Figure 4: Shape of the biconuate uterus after closure of the abdomen.

presented with obstructed labour later and had an urgent caesarean section with delivery of a live healthy baby boy with no severe intrapartum complications. The abnormality of the uterus may have been well documented after previous caesarean delivery but those records were not available during the course of the index pregnancy while patient could also not provide this relevant information.

Pregnancies in women with major uterine malformation may lead to recurrent pregnancy loss, preterm deliveries or possibility of term birth in a more favorable event [5-8]. Pregnancies in women with a complete bicornuate uterus maybe unsuccessful for reasons including unfavorable implantation at the septal area or at the horn resulting in restriction in blood supply and space for development of the fetus [7-8]. As in many women with a major uterine fusion abnormality, this patient had second trimester miscarriages during her first two successive pregnancies but preterm delivery has not occurred.

Her third and four pregnancies were carried to term probably due to low implantation in the left cavity and transverse lie of the fetus from early pregnancy giving baby more space to develop in the lower segment and both uteruses. Abnormal lie or presentation of the fetus may allow more space for the fetus to develop but it could also be reason for some structural deformities and low birth weight due to space restrictions for the development of the fetus in small uterine cavity [3,6-8].

The opportunity to diagnose the complete bicornuate uterus earlier was missed when the causes of the miscarriages she experienced were not investigated. History of recurrent pregnancy loss with menorrhagia could have been investigated with the use of ultrasound scan and hysterosalpingogram with high clinical suspicion if facility for hysteroscopy was not available. Even though an ultrasound was done during the early second trimester it also failed to make the diagnosis. The benefit of early diagnosis is a successful management of pregnancy and understanding outcomes since surgical treatment or correction of the complete bicornuate uterus in the patient may not be indicated as it is only recommended for women with recurrent pregnancy loss or preterm delivery [7,8].

Conclusion

Pregnancy in a woman with a major uterine fusion abnormality such as a complete bicornuate uterus may not proceed uneventfully even if it progresses to term. In this case report is a second successful term pregnancy in a woman with a complete bicornuate uterus after two previous pregnancies losses. However other factors such as patient behavior and harmful practices during pregnancy and labour in a woman with major malformation of the uterus can result in serious maternal and fetal complications.

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