Term tubal ectopic pregnancy delivered by laparotomy with a viable fetus: Case report

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Abstract

We describe an extremely rare medical phenomenon in a 28 year old who presented with undiagnosed tubal ectopic pregnancy at 41 weeks gestation and was delivered by laparotomy with linear salpingostomy at the Kenyatta National Hospital, Nairobi, Kenya.

Key words: Term ectopic pregnancy, Ultrasound

Introduction

Ectopic pregnancy has become recognised as a potentially fatal complication in early pregnancy being the leading cause of maternal mortality in the first trimester. A tubal gestation is one that implants and grows within the lumen of the fallopian tube. This invariably leads to complications due to the relatively poor vascularisation of the extra uterine implantation site and the vulnerability of organs to insults such as villous penetration and continuous pressure of gestation site. The possible sequelae are tubal abortion, rupture or death of the fetus with mummification and lithopedation. It is extremely rare for a tubal ectopic pregnancy to proceed to term. We present a rare case of a viable tubal pregnancy that progressed post term.

Case presentation

A twenty-eight year old Para 1+0 gravida 2 attended her prenatal care in a public hospital in Nairobi, Kenya. Her first pregnancy was normal with spontaneous vertex delivery. Her antenatal profile was unremarkable. An obstetric ultrasound performed at 26 weeks was apparently normal with a viable intrauterine fetus in breech presentation, normal placentation and amniotic fluid. Subsequent antenatal follow up was unremarkable. Clinically there was nothing in the appearance of the abdomen nor was there anything unusual on palpation to suggest an extra uterine pregnancy.

The patient presented at the hospital at 41 weeks with complaints of reduced fetal movements. An ultrasound performed then confirmed an intrauterine pregnancy in breech presentation with oligohydramnios. Unfortunately the biophysical state of the patient was not assessed, however a decision for delivery by caesarean section was made based on history of reduced felt movements and reduced amniotic fluid volume.

Intra-operative the uterus was found to be bulky with no pregnancy. There was a term gestational sac in the right fallopian tube. Linear salpingostomy was performed, the amniotic sac opened and a baby girl weighing 2280gm with an Apgar score of 10 at 5 minutes was delivered. The placenta was attached inside the enlarged hypertrophic fallopian tube. Ipsilateral salpingectomy with placenta *in situ* was subsequently performed. The left ovary and fallopian were normal. There were no pelvic adhesions. The abdominal cavity was normal with confirmation that this was not an abdominal pregnancy. Neonatal examination was normal and the baby had no visible congenital anomalies. Post delivery both mother and baby did well and were discharged home after four days.

Discussion

Ectopic pregnancy is the leading cause of maternal death worldwide during the first trimester of pregnancy. The incidence of ectopic pregnancy is 11/1000 of all pregnancies (1). The aetiology of the tubal ectopic pregnancy is the arrest of the fertilised egg as it moves along the fallopian tube, with a consequence of extra uterine implantation. Risk factors for ectopic pregnancy include pelvic infections, smoking, previous pelvic surgery, previous ectopic pregnancy, current and previous use of intrauterine contraceptive device (2). The patient in this case did not have any of the predisposing factors of ectopic pregnancy.

Diagnosis of ectopic pregnancy is usually made on ultrasound, though at time with late presentation this can be based on signs of maternal shock in case of tubal rupture. The latter is more common in resource poor settings due to lack of ultrasound facilities in early trimester. This case illustrates a case where lack of first trimester scan led to delayed diagnosis. The lack of identification of the precise location of the pregnancy in later scan may have been related to the skill of the sonographers. However, it is reported that 1% of ectopic pregnancies, if not detected by ultrasound in the first trimester, may actually progress beyond six months. When this happens, the ectopic pregnancy may be mistaken for an intrauterine pregnancy. Clinically, advanced pregnancy may, however, be suspected if; i) the fetal parts are easily palpable due to their proximity to the abdominal wall, (ii) there is persistent abnormal presentation and (iii) medical induction is unsuccessful (2,3).

With improved resolution of transvaginal ultrasound approximately 96% of ectopic pregnancies can accurately be diagnosed (1). This is however dependent on the skill of the sonographer. Only 10-20% of all extra uterine pregnancy diagnosed after 6 months of gestation results in a living baby (4). Significant proportions (40%) of these babies have congenital malformations which may be incompatible with life. The causes of the malformations are unknown but may be due to reduced amount of amniotic fluid as a result of increased absorption and disturbances in the germ plasma (3).

Conclusion

Early and accurate diagnosis of ectopic pregnancy is essential to avoid complications such as severe life threatening haemorrhage (5). When diagnosed early many ectopic pregnancies can be managed conservatively (2). In our search of literature only one similar case has been reported though unlike our case the fetus was not viable (3). This rarity may be due to improvement in diagnosis of ectopic pregnancies which makes such scenarios hard to come by anyway. In spite of good outcome in this particular case, the significance of early detection of ectopic pregnancy cannot be over emphasised.

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