HETEROTOPIC PREGNANCY: EMERGENCY LAPAROTOMY WITH LEFT SALPINGECTOMY AND SPONTANEOUS VAGINAL DELIVERY.

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Introduction

Heterotopic pregnancy is defined as the coexistence of an intrauterine pregnancy and ectopic pregnancy[1,2,3]. Heterotopic pregnancy in a spontaneous cycle is a rare entity with an estimated frequency below one per 30,000 pregnancies[4]. Its incidence evidently has increased in relationship with the widespread use of in-vitro fertilization, rising incidence of pelvic inflammatory disease (PID), and the use of ovulation inducing drugs[4,5,6,7,8].

Case Report

Mrs. A.C was a 36year old unbooked Para 2^{+0}(2 alive) Nigerian who presented in the night at our emergency unit with complaints of lower abdominal pains of 3 weeks duration at 14 weeks gestation. There was associated weakness, vomiting and dizziness. She had presented at a private hospital two weeks earlier with similar complaints and bleeding per vaginam, which later subsided after a few days bed rest and was discharged. She later became dizzy and fainted while waiting for an abdominal ultrasound scan and had to be rushed to a nearby private hospital from where she was referred to our hospital.

She attained menarche at the age of 12 years and her menstrual cycle was 26–28 days with 3–5 days of moderate blood loss. She had no history of vaginal discharge or sexually transmitted infection but she was using oral contraceptive pills, which she stopped seven months earlier because she wanted to get pregnant. She had no history of use of ovulation-inducing drugs. Her last child births were 4 and 6 years respectively before this present pregnancy and both were uneventful spontaneous vaginal deliveries at term. There was a positive family history of twinning and no contributory surgical history.

On examination, she was clinically pale, not jaundice, afebrile and not dehydrated. Her abdomen was distended and moved with respiration with generalized tenderness. Paracentesis abdominis revealed haemoperitoneum. Vaginal examination showed pale vaginal mucosae with no vaginal bleeding or discharge, cervix was firm, tubular about 2cm long and cervical os was closed. There was marked cervical excitation tenderness

on the left side. The uterus was bulky but uterine size could not be accurately determined because of abdominal distension and pelvic tenderness. The pouch of Douglas was full. Her chest was clinically clear and she had a regular, normal volume pulse of 96 beats per minute. The blood pressure was 120/80mmHg.

The abdominal ultrasound scan revealed a gravid uterus, that was bulky and anteverted but with a well-defined gestational sac noted within the uterine cavity and an active fetus in an unstable lie whose crown rump length (CRL) was 73mm. The gestational age (GA) was 13 weeks and 3 days. Another gestational sac was noted outside the uterus and located anteriorly to the active fetus. Its CRL was 72mm, but with a GA of 13 weeks and 1 day. These features were those of normal uterine gestation co-existing with an intra-abdominal gestation.

A diagnosis of a ruptured ectopic pregnancy coexisting with a normal uterine pregnancy was made.

She had emergency laparotomy with the following findings at operation; hemoperitoneum of 1.2litres and a ruptured left fallopian tube at the ampullary region. The right fallopian tube and right ovary were normal. But the left ovary was buried with the gestational sac in the pouch of Douglas. A male fetus of about 16 weeks gestation located in the pouch of Douglas was extracted with the gestational sac and placenta and was sent for histopathology. A gravid uterus of 14–16 weeks size was noted.
She had a left total salpingectomy, peritoneal lavage and drainage of the placenta bed. She was transfused with two units of compatible B Rhesus positive blood intra-operatively. She had an uneventful post-operative period. She was discharged on the 12th day postoperation after satisfactory clinical progress.

The pathology report of the surgical specimen showed macroscopic appearance of a male fetus attached to the placenta tissue by umbilical cord. The head circumference was 9cm. The organs were well formed and positioned. The umbilical cord measured 15cm in length and the placenta looked ragged and measured 8cm x 6cm x 3cm in diameter. Microscopic examination showed placental tissue consisting of numerous chorionic villi, myxoid stroma and was lined by trophoblastic cells. The umbilical cord contained a large vein and two small arteries.

She booked for antenatal care and had satisfactory progress. She had a spontaneous vaginal delivery at 38weeks + 6days of a live female baby with Apgar score of 6 in first minute and 8 in five minutes and birth weight of 2.6Kg after 9 hours and 10minutes of labour.

Her postnatal period was uneventful

Discussion

Heterotopic pregnancy is a potentially fatal condition, rarely occurring in natural conception cycles. Diagnosis of heterotopic pregnancy requires a high index of suspicion[9,10,11]. Diagnosis of extra-uterine pregnancy may be delayed as a result of visualization of an intrauterine gestation sac, leading to a less favourable diagnosis than for simple extrauterine pregnancy[12]. The detection rate of heterotopic pregnancy by transabdominal ultrasound is less than 14%[13]. If available, transvaginal ultrasound which gives a detection rate of over 90%[14] is superior to transabdominal ultrasonography and could help in arriving at an earlier diagnosis.

Heterotopic pregnancy is occurring more frequently because of an increase in genital infection, use of ovulation inducing drugs and increased use of in-vitro fertilization[4, 5,6,7,8]. The only identifiable risk factor this patient is her being of the Yoruba race. It has been postulated that the high twinning rate among the Yoruba race of Nigeria may be a possible etiological factor for heterotopic pregnancy[5].

Treatment involves resuscitation if the patient presents with hemorrhagic shock, laparotomy and salpingectomy, laparoscopic salpingectomy, fetal intrathoracic injection of potassium chloride (KCl) under ultrasound guidance[2, 3, 6, 8, 10, 11, 15]. The patient was resuscitated and had salpingectomy which was probably the safest treatment and the least traumatic for a good outcome of the intrauterine pregnancy. Laparoscopic management and intrathoracic or chorionic cavity injection of KCl was not considered in this patient because she was not hemodynamically stable at the time that the diagnosis was made.

In conclusion, heterotopic pregnancy though rare, is a potentially fatal condition and the need to maintain a high index of suspicion and early intervention will salvage the intrauterine pregnancy and prevent maternal morbidity and mortality associated with the ectopic pregnancy.

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