CASE REPORT

Ruptured Heterotopic Pregnancy: A Case Report and Brief Review of the Literature

* A. I. Spiff MB BS, ** N. M. Inimgba FWACS, *** R. S. Jamabo D Obst, FRCS, FWACS.

*Agip Industrial Clinic, Port Harcourt, **Department of Obstetrics and Gynaecology and *** Surgery, University of Port Harcourt Teaching Hospital, Port Harcourt, Nigeria.

ABSTRACT

Background: *Ruptured heterotopic pregnancy as a cause of acute abdomen is not commonly seen. The aim of this case report is to stress the importance of sonographic examination of the pelvic region in all symptomatic patients in the first trimester of pregnancy.*

Method: *The case report of a 23-year-old female with a ruptured heterotopic pregnancy is presented together with a brief review of the literature.*

Results: *A 23 year old female presented with signs and symptoms of an acute abdomen. She gave a history of 8 weeks amenorrhoea. Ultrasound scan (USS) showed an intra uterine pregnancy coexisting with a tubal pregnancy.*

Conclusion: *All patients with symptoms of abdominal pain and history of amenorrhoea should have a sonographic examination of the pelvic region.*

KEYWORDS: *Heterotopic Pregnancy; Acute Abdomen.*

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INTRODUCTION

A heterotopic pregnancy is by definition a multiple pregnancy with one or more intrauterine pregnancies coexisting with an ectopic pregnancy[1]. Intrauterine pregnancy coexisting with an extrauterine pregnancy is not common but cases have been recorded as far back as in the 1870's[2]. Clark and Ramsbotham in August, 1870, Chasser and Smith in July, 1872 reported well- authenticated cases of such combined pregnancies[2].

Unlike the cases of the 1870's when there were no efficient diagnostic facilities, cases are now diagnosed by ultrasound scan and managed by either exploratory laparotomy or laparascopic surgery.

CASE REPORT

A 23-year old woman G1, P_o^{+o}, presented with a few hours history of severe abdominal pain. There were no associated symptoms of vomiting and diarrhoea. There was also no per vaginam bleeding. She admitted to a history of 8 weeks amenorrhoea only after the USS had confirmed diagnosis.

The abdomen was full and very tender to touch. USS showed an intrauterine pregnancy coexisting with a tubal pregnancy close to the fimbrial end (Fig 1). An exploratory laparotomy was carried out and the findings were as follows: haemoperitoneum, an intact left tubal pregnancy and a bulky uterus. A left partial salpingectomy was carried out and the blood clots evacuated. She recovered from the surgery satisfactorily and the intrauterine pregnancy went on to term and she had a live female infant.

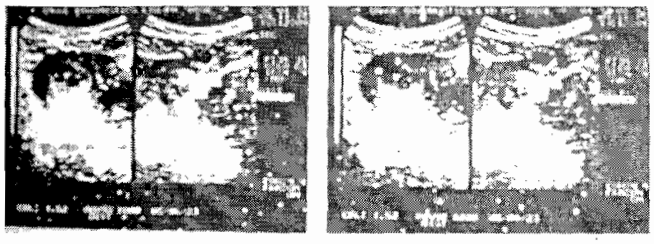

Fig. 1. Intrauterine Gestation and Ectopic Gestation in the left Adnexal Region with Haemoperitoneum indicating leakage

DISCUSSION

Heterotopic pregnancy is not commonly seen and the diagnosis is often missed and requires a high degree of vigilance on the part of ultrasonographer[3].

Studies carried out revealed that certain women are at a higher risk than others[4]. Those with a higher risk of developing an ectopic pregnancy with or without an intrauterine pregnancy are those being treated for infertility by gamete manipulation, previous pelvic surgery or a history of pelvic inflammatory disease (PID). Just as we found in our patient, cases have been reported in women without any risk factor[5].

The diagnosis of coexisting intrauterine and ectopic pregnancy is difficult and often delayed by attributing the symptoms of pain and bleeding to complications of the coexisting intrauterine pregnancy[5].

Sonography, especially the type equipped with trans-vaginal probe, plays the most important part in diagnosis[6].

If a gestational sac is seen in the uterus, the ultrasonographer should methodically examine the rest of the pelvis to exclude the possibility of a coexisting ectopic pregnancy[6]. Biochemical tests

Correspondence to: Dr. R. S. Jamabo

such as human chorionic gonadotrophin (HCG) are not usually helpful as levels are often in the normal range[7,8]. Laparoscopy is also an important tool in diagnosis of heterotopic pregnancy[1].

Heterotopic pregnancy remains one of the greatest enigma in gynaecology: no other pelvic condition gives rise to more diagnostic errors[9]. Patients typically complain of abdominal pain and irregular vaginal bleeding and may not correctly give history of a period of amenorrhoea. One-third of women do not recall the date of their last menstrual period (LMP). This further contributes to the diagnostic dilemma[9]. Our reported case gave a history of sudden abdominal pain but there was no associated vaginal bleeding. She only admitted to 8 weeks amenorrhoea after the USS had been done.

The commonest physical sign in women with heterotopic pregnancy is abdominal tenderness, often with rebound. Bimanual examination should be carried out very gently to avoid rupturing the ectopic sac. There may be a palpable adnexal mass and the uterus is often bulky, the value of these observations is limited by their subjectivity.

The ideal management of heterotopic pregnancy depends on a number of variables in an individual. The principal ones being the location and site of the ectopic pregnancy and whether the tube has ruptured or not[10]. Other factors include the past surgical and obstetric history, the state of the unaffected tube, the availability of microsurgical techniques and finally the wishes of the patient.

The mainstay of treatment of heterotopic pregnancy is surgery[11]. Surgery could be by an exploratory laparotomy or laparoscopic surgery[1]. At surgery, either a salpingectomy is done or removing the ectopic pregnancy with minimal injury to the tube in order to preserve the tube[12]. The major advantage of conservative surgery is that it preserves future fertility in those with bad past obstetric history, especially those with previous salpingectomy[13].

In view of the acute emergency situation at the time of presentation of most cases, an exploratory laparotomy with salpingectomy is the commonest mode of treatment.

CONCLUSION

Although intra-uterine pregnancy coexisting with extra-uterine pregnancy is not common, Obstetricians and Ultrasonographers must be alert and vigilant while examining patients, who present with abdominal pain during the first trimester of pregnancy.

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