Nigerian Journal of Clinical Practice
March 2008 Vol 11 (1): 86-88

HETEROTROPIC PREGNANCY: A REPORT OF TWO CASES

***J. O. Eigbefoh, **P .S. Mabayoje, *J.A. Y. Aliyu**

*Department of Obstetrics and Gynecology, *Irrua Specialist Teaching Hospital Irrua, Edo State*

***I.A.Hospital, Shell Petroleum Development Company, Warri, Delta State, Nigeria*

ABSTRACT

Heterotropic pregnancy is reported infrequently in Nigeria. Two cases were managed within the span of five years with the successful delivery of a live term baby in one of the patients. A high clinical index of suspicion is required because an intra uterine gestation does not rule out a co-existing ectopic gestation especially in this region with high twinning rate and tubal disease

INTRODUCTION

Heterotropic pregnancy is reported infrequently in Nigeria where the incidence of ectopic pregnancy is high. This may be due to frequent under reporting or missed diagnosis as the risk factors like especially high multiple pregnancy rate affect both conditions.

Over a five-year period (Jan 2000- Dec 2004) in a small company-run hospital with an average of 150 deliveries annually, there were five cases of ectopic pregnancy, two of which co-existed with an ultrasonic confirmation of a viable singleton intrauterine gestation. Both cases are reported. In conclusion, it is emphasized that an especially high clinical index of suspicion is required in our environment, bearing in mind that an intrauterine gestation does not rule out a co-existing ectopic gestation especially in this region with a high natural twinning rate and tubal disease

CASE REPORT 1

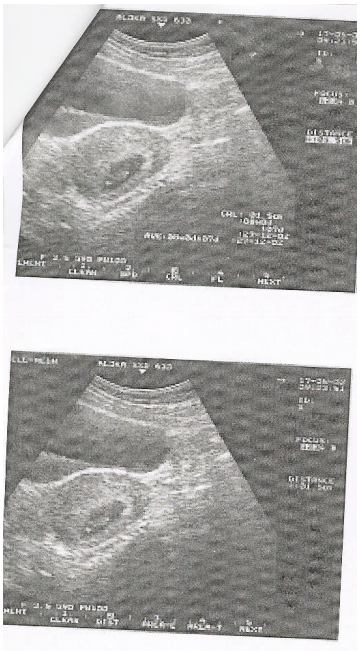
Mrs. S, E., a 27-year-old Para 2 who had a Caesarean section for placenta previa at her second delivery 4 years earlier. She had had a normal hysterosalpingogram as investigation for her secondary infertility and was on 100mg of clomiphene citrate for induction of ovulation in the cycle leading to the gestation. She had had a positive urinary pregnancy test and an intrauterine gestational sac on ultrasonography. Two weeks later, she presented with scanty bleeding per vaginam and vague lower abdominal pains. A repeat ultrasound scan revealed a viable fetus of CRL 1.5 cm, compatible with a gestational age of 8 weeks. She was thought to have threatened abortion and admitted for bed rest. Two days later she had a severe, sharp lower abdominal pain and collapsed, with haemodynamic decompensation. She subsequently had a laparotomy and left partial salpingectomy. The diagnosis of ectopic pregnancy was confirmed intrapoeratively. The specimen obtained was sent for histology. Findings were consistent with the clinical and intraoperative diagnosis .The intrauterine gestation progressed normally and she had an uncomplicated vaginal delivery of a healthy female baby at term.

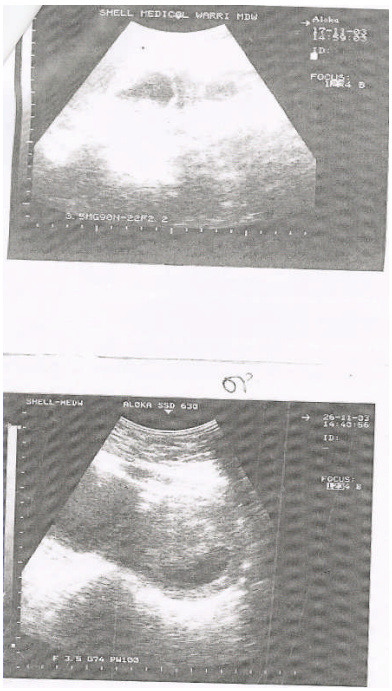
CASE REPORT 2

Mrs. O. P. was a 23-year-old Para 1 with a 4-year history of secondary infertility. She was on induction of ovulation with 100mg of clomiphene citrate. Pregnancy test done after 6weeks of amenorrhoea was positive. Ultrasound scan also done then revealed an intact intrauterine gestational sac with a fetal node. She was admitted a week later with scanty bleeding per vaginam. A Repeat pelvic ultrasounds scan showed a fetal node with cardiac pulsation. Whilst on admission, she developed persistent lower abdominal pain and dizziness. She subsequently went into hypovolaemic shock. Pelvic ultrasound scan then showed a viable intrauterine gestation as well as a left adnexal mass and free peritoneal fluid. The preoperative clinical diagnosis was confirmed intraoperatively. She had a laparotomy and left partial salpingectomy.

The histological validated the preoperative and intraoperative diagnosis. A follow up USS revealed a non-viable intrauterine gestation. The patient refused uterine evacuation but she presented with incomplete abortion 8 weeks later and had evacuation of retained products of conception.

Correspondences: Dr J O Eigbefoh





DISCUSSION

Heterotropic pregnancy was once said to be a rarity, with an incidence of 1:30,000 quoted[1]. Recent evidence suggests an incidence of 1 in 15,000[1]. Although the precise etiology of a combined pregnancy is frequently obscured, most of the factors are the same as those associated with ectopic pregnancy. The increased incidence observed in the developed world is attributed to assisted reproductive health techniques (ART)[2].

There is a profusion of literature on the high incidence of ectopic pregnancies in the third world including Nigeria. However there are scanty reports on the incidence of heterotropic pregnancy[3, 4,5] .The incidence is probably high for a couple of reasons. The most common anatomical reasons for combined pregnancy are pelvic inflammatory disease, which is quite high in Nigeria [6.] There is also profusion of etiological factors most of which are the same as those associated with ectopic pregnancy. This existing foundation for the occurrence of ectopic gestation, coupled with a naturally higher propensity for twinning in certain parts of Nigeria (1 in 20 in some parts of Nigeria) [6,7] and the abuse of over-the counter ovulation induction agents like clomiphene citrate, by women seeking a pregnancy, may be reasons why heterotropic pregnancies could occur more frequently [8]. Therefore, it would be appropriate to suggest that the low incidence of heterotropic pregnancy in Nigeria and other parts of the Third world is due to under reporting rather than a rarity of

the event. In these two cases, the women had secondary infertility and had been on clomiphene citrate. Berger and Taymore reported an incidence of combined pregnancy of as many as 1 in 100 in stimulated patients[2]. It has been suggested that the presence of an intra uterine pregnancy almost rules out an ectopic gestation. This assumption, which may be borne out of the apparent rarity of heterotropic pregnancies, can give the clinician a false sense of security. The use of transvaginal sonography and serum beta HCG assays reduce the need for laparoscopy in making a diagnosis of ectopic gestation [1,2,8] For a heterotropic pregnancy however, except for the visualization of a distinct, co-existing gestational sac/fetal echo in the adnexa, this is may not be so easy. The ectopic gestational sac can sometimes be missed or confused with a haemorrhagic corpus luteum cyst especially one into which haemorrhage has taken place. This was the case with one of the patients. (MRS O.P) Even in the presence of a demonstrated viable intrauterine fetus, when a patient presents with symptoms that may otherwise give reason to suspect an ectopic gestation, a laparoscopy is warranted. Chief amongst this is lower abdominal pain, usually out of proportion to vaginal bleeding. Fainting or dizziness tends to occur at rupture [1,2,8].

A high index of suspicion is necessary especially when established risk factors for ectopic pregnancy exist. This is even more so where the possibility of twinning, natural or induced, is higher especially following treatment for infertility with ovulation induction [2, 8] agents. Where a laparoscopy is not possible for whatever reasons, the close observation and follow up of such patients with serial transvaginal ultrasound scans to evaluate the adnexae is advisable, whilst the patient is kept in close proximity to facilitate prompt intervention when indicated. This was done in the two cases. This probably averted mortality that other wise may have occurred. Maternal mortalities of 0.98% [1,8] have been quoted for developed countries but the figure like other health parameters in the third world is probably much higher. That one of the two cases had a live term birth was an added bonus. This is because of the especially high fetal mortality rate of 20 to 70% quoted for the intrauterine pregnancy. The extra uterine gestation has a mortality rate of > 90%. This was demonstrated in these two cases, as the ectopic pregnancies were excised [1].

The presence of an intrauterine gestation should not diminish the suspicion of an existing, or rather, a co-existing ectopic pregnancy especially in the third world environment with high preponderance of etiological factors for ectopic pregnancy.

REFERENCES

1. **Rock JA** Ectopic pregnancy. In: J. D Thompson and J. A. Rock (Ed); Te Lindes Operative Gynacology . 7th Edition.. J.B, Lippincott company 1992, Pp 411-436

2. **Berger MJ, Taymore ML.** Simultaneous intrauterine and tubal pregnancies following ovulation induction: Am J Obstet Gynaecol 1972; 113: 812

3. **Sotubo O, Aboyeji AP.** Ectopic pregnancy in Ilorin, Nigeria: A five-year review. Nig. Med. Pract. 1994; 27 (314): 25-27

4. **Devoe RW, Pratt JH.** Simultaneous intrauterine and extra Uterine pregnancies. Trop. J. Obstet Gynaecol. 1948; 1119-21

5. **Ekele BA, Audu LR, Oyetunji JA.** Combined extrauterine and Intrauterine pregnancy. Trop. J. Obstet Gynaecol. 1999; 16(1): 61-62

6. **Okonofua FE**. Preventing unsafe abortion in Nigeria. Afr. J. Reprod Health 1997; 1(1): 25-36.

7. **Knox G, Morley D.** Twinning in yoruba women. J Obstet. Gynaecol Br emp 1960 67: 981

8. **Reece EA, Petrie RH, Sirmans MF et al** . Combined intrauterine and extrauterine gestations: a review. Am J Obsterics Gynaecol 1983; 146: 323