CLOMID INDUCED COMBINED EXTRAUTERINE AND INTRAUTERINE PREGNANCY – A CASE REPORT

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SUMMARY

A 23 year old Indian lady, gravida 1 para O, with Clomid induced pregnancy was admitted to the University Hospital on 29 August 1981 with signs and symptoms of pregnancy and intraperitoneal bleed. Period of amenorrhoea at time of admission was eight weeks. Emergency laparotomy revealed a right leaking ectopic pregnancy and an enlarged gravid uterus. Ultrasound done on the 7th post operative day confirmed concurrent intrauterine pregnancy which progressed normally to term, ending wih a normal healthy baby at 39 weeks through an assisted breech delivery.

INTRODUCTION

Combined intrauterine and extrauterine pregnancy, known by others as "Heterotopic Pregnancy" is a comparatively rare but interesting phenomenon. Since the first case ever reported by Duverney in a post mortem report in 1708, the total number of documented cases is steadily increasing. In 1926, Novak [1] published a review of 276 cases, and by 1948 the number had reached 375 cases. [2] By 1961, the number totalled 506. [3] Review of recent literature puts the latest estimate at well over 500 cases.

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This case is thought to be worth reporting for the following reasons:

1. It is the first case discovered in the University Hospital, Kuala Lumpur with the total number of delivery in excess of 50,000 since the hospital started in 1966. (The nearest reported case in this region was by Sinnathuray and Choo [4] in 1966 in Singapore.)
2. The pregnancy is Clomid induced.
3. Unlike some other cases where the diagnosis is by indirect evidence, the diagnosis in this patient is beyond doubt based on objective findings at laparotomy and ultrasonographic confirmation of intrauterine pregnancy corresponding to period of amenorrhoea.

CASE REPORT

A 23 year old Indian housewife, gravida 1 para O, was first seen at the accident and emergency unit of the University Hospital, Kuala Lumpur with complaints of acute lower abdominal pain of two days duration.

Prior to being seen here, she was under the care of a private gynaecologist for her problem of primary infertility of two years duration. A diagnostic currettage done in the process of investigation revealed proliferative endometrium suggestive of anovulatory cycles. She was started on a 7 day course of clomiphene and she conceived after the first course. Her last normal menstrual period was on 29 August 81 and her period of amenorrhoea was 8 weeks at the time of her admission.

At the accident and emergency, she was noted to be in pain. There was slight pallor noted. However,

her vital signs were stable. There was tenderness and guarding over the lower abdomen and rebound tenderness was elicited. Pelvic examination revealed a tender cervix on rocking, as well as marked tenderness over the right fornix and pouch of Douglas. The uterine size was difficult to ascertain because of the abdominal rigidity. She was diagnosed as having a bleeding ectopic pregnancy and subjected to an emergency laparotomy.

At laparotomy, about 100mls of blood was found at the punch of Douglas. The right fallopian tube was distended by a tubal pregnancy measuring 3 by 8 cm with trickle of blood oozing from the abdominal ostium. The left tube was normal. Multiple cysts were noted on the right ovary while the left ovary contained a solitary cyst of about 2 x 2 cm. The uterus was enlarged to about 8 weeks size. A right partial salpingectomy and biopsy of right ovarian cyst was performed. Post operative recovery was uneventful. Histology report confirmed a right ectopic pregnancy with corpus luteum of the right ovary.

In view of the enlarged uterus, a post operative ultrasound was performed on the 7th post operative day. A gestational sac containing a mobile foetus in the uterine cavity was demonstrated. The gestation was estimated to be about 8 weeks which corresponded to the period of amenorrhoea.

She was discharged well and her intrauterine pregnancy progressed uneventfully except for a persistent breech presentation noted after the 32nd week. She went into spontaneous labour on 1 June 82 at 39 weeks maturity and had an assisted breech delivery after 8 hours of labour. A healthy male baby, weighing 3.07 kg with an apgar score of 8/10 was delivered. Both the mother and baby were well.

DISCUSSION

The incidence of combined intra and extrauterine pregnancy has been estimated to be between 1 in 12,000 and 1 in 30,000. [6] This is the first documented case occurring in this hospital after a total number of delivery exceeding 50,000. (However, at the time of writing, a case of combined ovarian and intrauterine pregnancy was just discovered.)

The exact aetiology of combined intra and extrauterine pregnancy is still unresolved. It raises the possibility of superfecundation (two ovulations and conceptions in the same menstrual cycle) or superfetation (two conceptions in two different menstrual cycles). It is evident that there must be two ova, either from one or both follicle.

Woodruff [7] classifies these pregnancies as :

I. Heterotopic (combined intra and extra uterine) pregnancies. These may either be concurrent (simultaneous intra and extrauterine pregnancy) or compound (superimposition of a uterine pregnancy on an older ectopic pregnancy) and there are two possible types each.

a) Single intrauterine and tubal gestation.

b) Multiple intrauterine and any extrauterine site.

II. Multiple extrauterine pregnancies, which can be

a) bilateral tubal (any combination)

b) unilateral tubal (any number)

c) combined tubal and extrauterine sites (any combination)

Faxon [8] expressed the belief that, of approximately 250 cases, 10 percent represented an intrauterine pregnancy superimposed upon an ectopic pregnancy that had occurred one month to several years previously.

It is evident that this case belongs to category I (a) for the following reasons :

1. Clomid induced pregnancy raising the high possibility of superovulation.
2. The ultrasonic evidence of intrauterine pregnancy corresponding to the period of amenorrhoea. (Novak [2] observed that when superfetation occurred, the ectopic implantation always preceded the uterine implantation.)

It is further postulated that the right ectopic pregnancy resulted from ovulation of the right ovary (corpus luteum of right ovary proven histologically) and the intrauterine pregnancy resulted from the left ovary (As a single cyst of the left ovary was noted which appeared like a corpus luteum. Unfortunately, no histological confirmation was available).

Existence of two corpora lutea of pregnancy were noted by previous authors. [9,10]

The other interesting aspect of this case is that this heterotopic pregnancy occurred in a Clomid induced pregnancy. On scrutiny of the cumulus index medious, the authors are unable to find a similar case and hence this is probably the first documented case in which a fertility pill is

implicated in the aetiology of the phenomenon. As it is only in recent years that Clomiphene has been in wide use in the induction of pregnancy, it is reasonable to postulate that, with it's potent stimulus resulting in frequent superovulations, that such similar cases will account for more cases in the near future.

Finally, one should be made aware of the existence of combined intra and extrauterine pregnancy while doing an evacuation of uterus per vaginum for whatever purpose. To empty an uterus and leave an ectopic pregnancy behind would be disastrous.

Ultrasonic demonstration of combined ectopic and intrauterine pregnancy has been reported by Penkava and Bohling. [11] However, one should be extremely sceptical regarding the diagnosis of extrauterine pregnancy based on ultrasound. It is extremely difficult to demonstrate an extrauterine pregnancy and the sonographic picture may be confused with cysts of the ovaries. Furthermore, the existence of intrauterine pregnancy does not exclude an extrauterine pregnancy.

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