Heterotropic Pregnancy

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Introduction

Heterotropic pregnancy is defmed as the pregnancy occurring simultaneously in different body sites. Commonest one is concurrent intra-uterine and tubal pregnancy. It is a rare condition thought to occur in one of 30000 spontaneous pregnancies[1]. Diagnosis is only confirmed when the cardiac activity of extra and intrauterine fetus can be detected[2]. A case of heterotropic pregnancy is presented here.

Case Report

A 30 years old 2nd gravida with previous history of one abortion was admitted in emergency. She had amenorrhoea of 10 weeks, vaginal bleeding and pain in left iliac fossa. This conception was assisted with the use of clomiphene citrate. On examination she looked well, her pulse was 80/mm and blood pressure 120/80 mmHg. Abdominal examination revealed mild tenderness in left iliac fossa. On vaginal examination there was brownish discharge, cervical os was closed, uterine size could not be assessed. There was a vague mass in the pouch of Douglas, tender and firm. Since the patient came in evening hours, no specific investigation could be performed and she was kept under observation till next morning. Ultrasonography was performed which revealed a 10 weeks alive intra-uterine pregnancy, alongwith an ill-defined left adnexal mass which was encroaching the pouch of Douglas. Mass was showing solid and cystic areas. There was no free fluid in the pouch of Douglas. It was difficult to measure the exact size of the mass.

Since the diagnosis was in doubt and heterotropic pregnancy was not suspected, a diagnostic laparoscopy was performed. Laparoscopic findings revealed 10 weeks size uterus and a complex mass in left adnexal region which consisted of clotted blood. Right tube and ovary could not be visualized. There was minimal amount of old blood in pelvic cavity. Immediate laparotomy was performed.

The operative findings confirmed laparoscopic findings. Clots were removed from the left tube ovary and the rest of the pelvic cavity. Right tube and ovary were normal. The left tube was torn at its ampullary part. It was friable and irregular therefore repair was not possible. Left sided salpingectomy was performed and specimen was sent for histopathology. Her postoperative course was uneventful. Since she had intact itnra-uterine pregnancy, which was manipulated during laparotomy emperically, she was put on tocolytic drug Salbutamol. For the first 24 hours 5mg in 500 ml dextrose saline 10 drops/minute was given intravenously. Later on she was switched over to oral therapy of Salbutamol (2mg TDS). Her blood group was A negative and her husband's was A positive. Anti-D antibodies 300 ug was given intra-muscularly after confirming the absence of anti-D antibodies in the blood. She was discharged on 6th post-operative day. She was asked to come for regular follow-up. Histopathology report confirmed the ectopic tubal pregnancy.

She came monthly for regular ante-natal check-up. On each visit her examination and ultrasonography was performed. All growth scans were appropriate for gestational age. At 39 weeks she was admitted in the hospital. Her bony pelvis seemed to be inadequate for the normal delivery, moreover, she had bad obstetrical history. She underwent an elective caesarean section. An alive female baby of 3 kg was delivered. Baby had A positive blood group and her anti-D antibodies were negative. She was therefore given anti-D antibodies (300 jig). Her postoperative period was uneventful. She was discharged on her 6th post-operative day.

Discussion

Heterotropic pregnancy i.e. pregnancy occurring at the same time in the uterus and elsewhere, commonly in the fallopian tube, is considered extremely rare[1]. First heterotropic pregnancy was reported in 1708. Initial belief was that intra-uterine pregnancy would rule out an ectopic pregnancy, but this is no longer true. The incidence is much higher in United States and Western Europe. The condition is associated with certain high risk groups. Current epidemic of pelvic inflammatory disease and recent advance in gynaecologic techniques have resulted in a marked increase in the incidence of combined pregnancy[3].

The frequency is higher in certain high risk patients, specially those undergoing assisted reproduction like invitro fertilization (IVF) and gamete intra-fallopian transfer (GFT)[4]. The high prevalence of tubal damage among IVF patients and the use of super-ovulation and multiple embryo transfer might predispose patient to this condition[5]. One study reports an incidence of heterotropic pregnancies in IVF/GIFT procedures as 1:100[1]. Some of the people have mentioned the association of IUCD and heterotropic pregnacy.

Most of the time diagnosis is made during laparotomy. Diagnosis is only possible when the cardiac activity of the extra and intra-uterine fetus can be detected simultaneously. In high risk patients careful sonographic examination of adnexal region is advised[6]. Use of endovaginal ultrasound is indicated in all patients using clomiphene citrate for infertility[7]. Treatment depends upon the duration of pregnancy and general condition of patient. It may be conservative. People have used injection of potassium chloride and methotrexate in the extra-uterine pregnancies and intra-uterine progressed[8]. In case of advanced pregnancy laparoscopic surgery is done. Open laparotomy still remains the conventional treatment of this condition.

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