Case Report

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An Unruptured Isthmic Ectopic Pregnancy: A Case Report

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Abstract

About 1% of pregnancies are ectopic, usually implants in the fallopian tube. Most ectopic pregnancy (EP) continues to grow and lead to rupture the tube. The most common site of EP is the ampulla and 12% occurs in isthmic portion. Early Rupture is the usual outcome of isthmic pregnancy and usually there is early tubal rupture in the first few weeks. In this report a 29 years old infertile woman had a large size unruptured isthmic EP in left fallopian tube following ovulation induction that was managed with laparoscopy. Therefore, an isthmic EP may attain a large size prior to rupture.

Introduction

Pregnancy is called ectopic when a fertilized ovum implants outside the uterine cavity. Over 98% cases implants in the fallopian tube [1, 2]. The precise mechanisms underlying of tubal ectopic pregnancy are unknown. Tubal abnormalities and dysfunction have been speculated to lead to tubal ectopic pregnancy [3].

Most common site of EP is the ampulla and about 12% of EP occurs in the isthmic portion. Rupture is the usual outcome of isthmic pregnancy. As a rule whenever there is tubal rupture in the first few weeks the pregnancy is situated in the isthmic portion [4]. Diagnosis often requires serial human chorionic gonadotropin levels along with ultrasound and in some cases dilatation and curettage [5]. The treatment strategy is dependent on the patient condition. Treatment contains expectant management, medical and surgical therapy [4, 6, 7]. Salpingectomy, segmental resection and reanastomosis are used for the treatment of unruptured isthmic pregnancy by laparatomy or laparascopic approach [4].

Introducing the patient

A 29-year-old woman, para 0, was presented with 2 week delay of her menstruation. She was infertile and her marriage date was 4 years ago. The patient underwent ovulation induction (clomiphene citrate 100 mg/day from 3 to 7 day of cycle). The serum β-hCG test was positive and the patient had no complaint.

In 8 weeks of gestation, abdominal ultra sound revealed no intra uterine pregnancy and there was an adnexal mass on the left side of the uterus (35 mm lucent destiny) without any free fluid in pelvic cavity. Presumptive diagnosis of ectopic pregnancy was made. She was admitted in hospital, her vital sign was normal and no abdominal pain or vaginal bleeding was present. Transvaginal ultrasonography was performed in the second admission day and it showed left adnexal mass 39×42 mm contains gestational sac and suspicious fetus without heart beat. Based of sonography report the uterine cavity was empty and endometrial thickness was 14 mm and there was no free Fluid in the pouch of Douglas.

Serum β-hCG concentration was 3200 mIU/ml two previous weeks and it rise to 90089 mIU/ml at 8 week of gestation. Ectopic pregnancy was strongly suspected and laparoscopic surgery was performed under general anesthesia. There was a mass about 40×40 mm in isthmic area of left tube that in laparoscopic view it was difficult to differentiate the mass from the uterus. Salpingectomy was performed and the intra and post operative course were uneventful and patient was discharged on first post operative day. After 7 days, she returned for post operation visit and she was well.

In the pathologic report the size of mass was 40×42 mm and histological findings showed some fetal and chorionic villous tissue attached to the luminal surface of isthmic portion of the left tube without penetrating to the serous. Therefore, an intact isthmic ectopic pregnancy with 40×42 mm size was the final diagnosis

Discussion

Fallopian tubes are the main place of ectopic pregnancy and the most frequent site of ectopic pregnancy is ampulla [8]. Isthmic portion of tube is a relatively rare place of implantation and usually early rupture occur in these pregnancies [4]. So, our case is rare because the EP was to growing and the β-hCG level was significant. There are some risk factors for ectopic pregnancies and infertility, using infertility drugs and assisted reproductive technology are the risks [4, 5] our case was a case of infertility and she used one cycle infertility drug. Diagnosis of ectopic pregnancy is usually possible by serial serum β-hCG level and ultrasonography [7]. In our case the diagnosis is made by transvaginal ultrasonography.

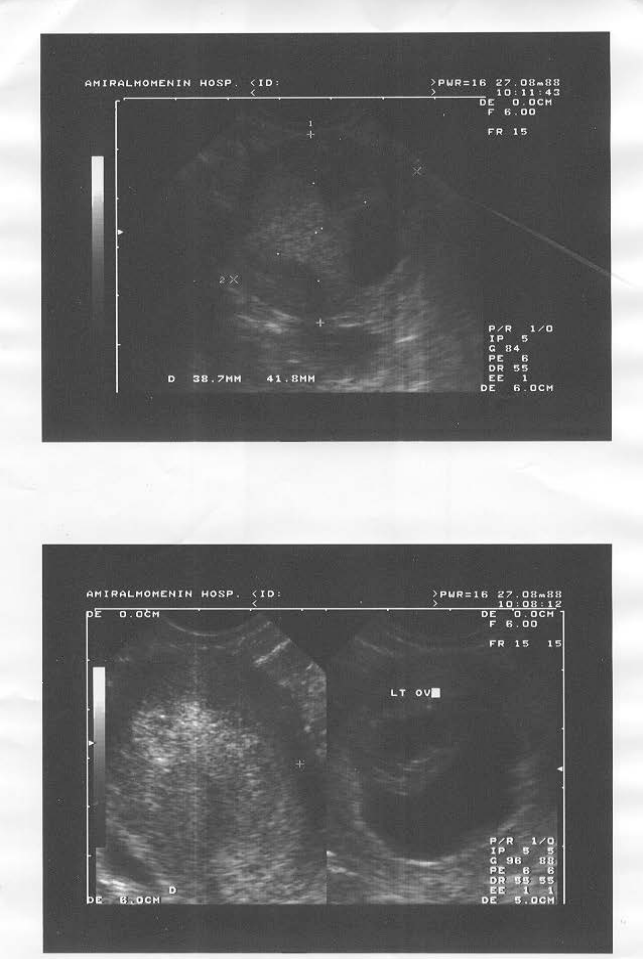

Figure 1. Sonographic view of isthmic ectopic pregnancy

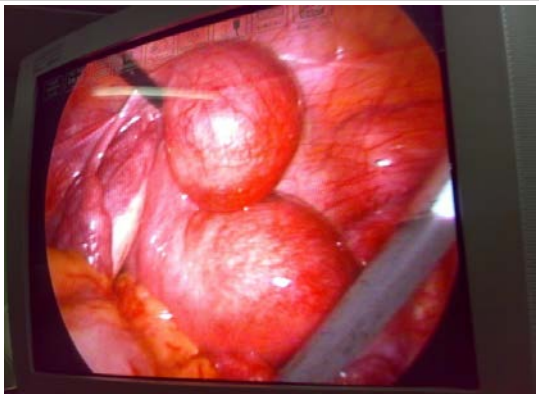

Figure 2. Intact isthmic ectopic pregnancy

Patient condition, size of mass, gestational age, fertility, β-hCG level and fetal cardiac activity are important factors in route of treatment. Salpingectomy, segmental resection and reanastomosis are used for the treatment of unruptured isthmic pregnancy [4, 6, 7]. Laparoscopic salpingectomy was used for our case in regard to the size of mass, gestational age and serum β-hCG level.

This is a rare case of intact isthmic EP because usually the isthmic portion of tube has a small lumen and rupture of isthmic portion of tube occurs in first few weeks of pregnancy, so large EP in isthmic portion is noticeable.

Conflict of Interest

The authors declare no conflict of interest.

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