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Misdiagnosed Ovarian Pregnancy to Threatened Abortion: A Case Report

Roghaieh Rahmani Beilondi,[1] Javad Baghri,[2] Mohammadreza Rahmani Beilondi,[3] and Raheleh Derafshi[4,*]

[1]Department of Midwifery, Nursing and Midwifery Faculty, Gonabad University of Medical Sciences, Gonabad, Iran
[2]Department of Islamic Science, Gonabad University of Medical Sciences, Gonabad, Iran
[3]Lecturer, M.SC in Clinical Psychology, Gonabad University of Islamic Azad, Gonabad, Iran
[4]Department of Pediatrics, Medicine Faculty, Gonabad University of Medical Sciences, Gonabad, Iran

[*]*Corresponding author*: Raheleh Derafshi, Department of Pediatrics, Medicine Faculty, Gonabad University of Medical Sciences, Gonabad, Iran. E-mail: raheleh_derafshi@yahoo.com

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Abstract

This study is about a patient with a history of infertility and polycystic ovarian disease who was admitted with spotting and severe abdominal pain, There was one misdiagnosis about this patient and progesterone was prescribed for treating of threatened abortion, following transvaginal ultrasound, one heterogeneous echogenic mass with dimensions of 5.8 × 18 in the vicinity of the left ovary was reported in favor of ectopic pregnancy. The patient was hospitalized and treated with methotrexate with diagnosis of an ovarian ectopic pregnancy. Pregnant women with complaints of bleeding and spotting in early pregnancy should be evaluated in terms of ectopic pregnancy in addition of abortion and molar pregnancy. The aim of this study was to introduce a new case of misdiagnosed ovarian pregnancy instead of threatened abortion.

Keywords: Misdiagnosed, Ovarian Pregnancy, Threatened Abortion

1. Introduction

Ectopic pregnancy is the most common cause of maternal mortality in the first trimester of pregnancy which fetus is implanted out of uterine cavity and most often in tubes. It is one of the pregnancy emergencies and often requires rapid intervention. According to a report from the world health organization 9.4% of maternal deaths caused by ectopic pregnancy. Ectopic pregnancy is a common complication in the world. The rate of disease is different in developing countries from 1 in 44 up to 1 in 21 pregnant women, while in western developed countries, its prevalence varies between 1 in 233 up to 1 in 280 births [1]. The incidence of ovarian pregnancy is 1 in 7000 up to 1 in 40000 in live birth and 0.5% - 3% of all ectopic pregnancies are included [2]. Ovarian pregnancy in women without clinical, laboratory and ultrasound findings are indistinguishable from a tubal pregnancy. Now the only risk factor associated with the incidence of ovarian pregnancy is the use of an intrauterine device [3]. Other risk factors which are involved in the creation of ectopic pregnancy include smoking, endometriosis and previous cesarean sections [4]. Pelvic inflammatory disease, age and history of ectopic pregnancy can also be predisposing factors for the disease [5]. The delay in the release of ovum, thickening of the tunica albuginea, tubal dysfunction and intrauterine contraceptive devices contribute to its development [6]. Accurate clinical diagnosis of ovarian pregnancy is difficult but oncoming infertility can be prevented by using vaginal ultrasound, beta human chorionic gonadotropin hormone measurement, early diagnosis and conservative treatment of person [7]. Although it can be grassed in the laparoscopy of ovarian pregnancy, by bleeding of corpus luteum or ruptured ovarian cyst but the only accurate way of diagnosis is tissue sampling [8]. By reporting a case of ovarian pregnancy with a history of two ectopic pregnancy, researchers found that the ovarian pregnancy is rare and its clinical diagnosis is difficult, but in case of early diagnosis, patient's future fertility remain unchanged [9]. In a study that was conducted on a rare case of heterotypic pregnancy, it was reported that in most cases of heterotypic ovarian pregnancy, the use of an intrauterine device has been the predisposing factor in the last decade [10]. In this report a rare case of spontaneously ovarian ectopic pregnancy is expressed.

2. Case Presentation

This study is about a patient with a history of polycystic ovary, first gestation, zero parity without any abortions who was visited with general physician with com-

plaint of severe abdominal pain and spotting, from 11 days before and followed by 49 days missing of menstrual period. The patient had a history of polycystic ovary and her current pregnancy occurred without use of any drug. After 49 days of menstrual missing, pregnancy test was requested by a doctor on 2016.8.6 .The titers of the beta human chorionic gonadotropin hormone was 234 which represented a positive pregnancy test. At the next day, the patient experienced severe abdominal pain and spotting and was admitted at the genecology ward of hospital. The patient was hospitalized for 5 days and treated with intravaginal cyclogest (progesterone). Transvaginal ultrasound application results showed decidua reaction in endometrial lines. There was not also any gestational sac inside or outside the uterus. It was recommended to do a vaginal ultrasound in case of increasing in beta human chorionic gonadotropin hormone titer. The patient was discharged after five days, and again on 2016.8.13 had been admitted with severe abdominal pain and spotting. The gynecologist requested beta human chorionic gonadotropin hormone and transvaginal ultrasound for the patient. Beta human chorionic gonadotropin hormone titer which was sent to an outside laboratory at the same day showed the titer of 1304 and other tests of beta human chorionic gonadotropin hormone which was performed on 2016.8.16, showed a titer of 1700. Transvaginal ultrasound which was performed on 2016.8.16 represented the abundant clot in the endometrial cavity, but residues of pregnancy were not seen. Heterogeneous echogenic mass with dimensions of 5.8 $\times$ 18 mm in the vicinity of the left ovary were also reported in favor of ectopic pregnancy as the first differential diagnosis.

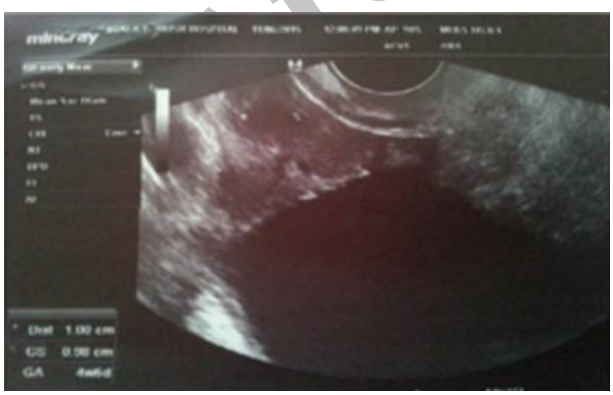

Figure 1. Ovarian Gestational Sac Ultrasound Images Before Medical Treatment with Methotrexate

3. Discussion

Ectopic pregnancy is one of the most common gynecologic emergencies and occurs in 2% of pregnancies [11]. Ovarian ectopic pregnancy is a rare form of ectopic pregnancy [6]. Signs and symptoms are similar to other ectopic pregnancies, including positive pregnancy test, abdominal pain and vaginal bleeding [12]. Due to the alignment of the symptoms with threatened abortion, the diagnosis of it is a great challenge [13]. It is difficult to diagnose an ovarian ectopic pregnancy before surgery [12]. Incorrect diagnosis of ovarian pregnancy is common because more than 75% of them are dismissed with corpus luteum rupture. Progress in ultrasound and the use of more sensitive radioimmunoassay tests for the detection of beta human gonadotropin hormone, is leading to more accurate diagnosis of the disease [3]. Ovarian pregnancy like non-tubal ectopic pregnancy may occur without any typical risk factors [12]. In every ectopic pregnancy with size more than 5.3 cm, beta human chorionic gonadotropin hormone titer higher than 5000 or the existence of fetal heart in ultrasound, the risk of failure of medical treatment is high and surgery is the preferred treatment. In cases of the risk of failure with a single dose of methotrexate therapy, multiple-dose regimens can be used [14].

In the case above which we reported, spotting and severe abdominal pain was the most important complaints of the patient. Vaginal bleeding is the most common symptom in ectopic pregnancies that has been reported [15]. After confirmation of ectopic ovarian pregnancy by transvaginal ultrasound ovarian and document of BHCG titer, the patient was treated with two doses of methotrexate. In the early stages of the disease which are detected by transvaginal ultrasound, patients will benefit from treatment with methotrexate [14]. So, with careful clinical assessment and vaginal examination, cases of ovarian ectopic pregnancy in the early stages of disease can be treated with medical methods that is very important to maintain normal anatomy for future fertility [15]. as a result, The patients was admitted with good general appearance and chief complaints of bleeding and abdominal pain and Initially was treated with intravaginal cylogest (progesterone) with diagnosis of threatened abortion. Although ovarian ectopic pregnancy is a rare disease, after careful evaluation, medical procedures should be chosen to maintain fertility, especially in young women. One of the challenges that exist in the diagnosis of ectopic pregnancy, is that due to the common symptoms of threatened abortion, most notably bleeding, sometimes patients are treated with a diagnosis of threatened abortion with progesterone. That's why in every patient with complaints of bleeding or spotting in early pregnancy, it is necessary to

rule out ectopic pregnancy by transvaginal ultrasound before treatment with progesterone.

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Footnotes

Authors' Contribution: Raheleh Derafshi was executor of the article. Roghaieh Rahmani Beilondi, Javad Baghri and Mohammadreza Rahmani Beilondi introduced case report and edited the article.

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