

Case Report / Olgu Sunumu

Three consecutive recurrent ectopic pregnancies: a case report

Ardışık üç kez tekrarlayan ektopik gebelik: olgu sunumu

Çağlar Yıldız¹, Savaş Karakuş, Özlem Bozoklu Akkar, Hidayet Yeniocak, Meral Çetin

Department of Obstetrics and Gynecology, Cumhuriyet University Faculty of Medicine, Sivas

Abstract

Ectopic pregnancy is a life-threatening pregnancy complication occurring in approximately 2% of all pregnancies. Combination of ultrasonographic findings, consecutive levels of human chorionic gonadotrophin, and also clinical suspicion are important for diagnosis. The rate of recurrence rises in patients with a history of previous ectopic pregnancy. Expectant management and surgical or medical treatment are the options for ectopic pregnancy. We presented here a case that had three times of consecutive recurrent ectopic pregnancy with the literature review.

Keywords: Ectopic pregnancy, recurrent, methotrexate

Özet

Ektopik gebelik, tüm gebeliklerin yaklaşık %2'sinde görülür ve yaşamı tehdit eden bir gebelik komplikasyonudur. Ultrasonografi bulguları, ardışık serum insan koryonik gonadotropin ölçümleri ve tabiki klinik şüphenin birlikteliği tanı için önemlidir. Ektopik gebelik hikayesi olan hastalarda tekrarlama oranı artmaktadır. Bekleme tedavisi ve cerrahi veya ilaç tedavisi ektopik gebelik için tedavi seçenekleridir. Üç kez ardışık olarak tekrarlayan ektopik gebelik olgusunu literatür taraması eşliğinde sunduk.

Anahtar sözcükler: Ektopik gebelik, tekrarlayan, metotreksat

Introduction

Ectopic pregnancy is a complication of early pregnancy, which describes the implantation of the blastocyst outside the uterine cavity and occurs in approximately 2% of all

¹ Corresponding author:

Dr. Çağlar Yıldız, Kadın Hastalıkları ve Doğum AD, Cumhuriyet Üniversitesi Tıp Fakültesi, Sivas.
Email: dr_caglaryildiz@yahoo.com

pregnancies [1]. It is a life-threatening pregnancy complication; so early diagnosis becomes very important in treatment. Diagnosis is based on a combination of ultrasonographic findings, consecutive levels of human chorionic gonadotrophin (hCG) and also clinical suspicion. Tubal surgery, history of ectopic pregnancy, in utero diethylstilbestrol exposure, pregnancy with a current intrauterine device, tubal damage, infertility, history of genital tract infection, and having multiple sexual partners are the risk factors for ectopic pregnancy [2]. The rates of ectopic pregnancy recurrence after a salpingectomy and salpingotomy are 10% and 15%, respectively [3].

We aimed to discuss the literature related with the management of recurrent ectopic pregnancy cases by presenting a case that had three times of recurrent ectopic pregnancy.

Case

A 25-years-old woman, gravida 3, para 0, admitted to the outpatient clinic, complaining of abdominal pain and vaginal bleeding after 6 weeks of amenorrhea. Her previous menstrual cycles were regular in 30 days, with average flow and no dysmenorrhea. The patient had a history of two consecutive ectopic pregnancy. The first one was right tubal ectopic pregnancy and she had undergone a salpingostomy by laparotomy and second one was detected on left adnexal region and treated with methotrexate. After three months of methotrexate therapy a hysterosalpingography (HSG) was performed and bilateral tubal patency was found.

A new ectopic pregnancy was occurred after one month of HSG. She had tenderness on right lower quadrant of the abdomen with normal vital signs. Transvaginal ultrasonography showed an empty uterine cavity and a gestational sac in the right adnexa, without a fetal cardiac activity and there was no intra-abdominal free fluid. Laboratory tests showed that hCG level 1608 mIU/mL. Occlusion of the tubes and preparing for an in vitro fertilization procedure was offered but the patient did not accept.

Single-dose protocol of methotrexate (50 mg/m²) is administered intramuscular on day 1, and the hCG value is measured 3393 mIU/mL and 3113 mIU/mL respectively on days 4 and 7. The patients liver function tests were normal and she was suggested an additional dose of methotrexate. After the second dose of methotrexate, the levels of hCG were decreased in following tests.

Discussion

Ectopic pregnancy is a gynecologic emergency, and a serious complication of early pregnancy because of the association with maternal morbidity and mortality in the first trimester [4]. Management has changed over the years; conservative approach is preferred for the treatment. Ectopic pregnancy is the most important cause of maternal morbidity and mortality in the first trimester of pregnancy [5, 6]. The worldwide incidence of ectopic pregnancy is not known accurately. History of ectopic pregnancy, tubal surgery, tubal pathology, in utero diethylstilbestrol exposure, infertility, pelvic inflammatory disease and smoking are the risk factors for ectopic pregnancy, and tubal surgery is accepted to be the major risk factor for ectopic pregnancy [7]. Ectopic

pregnancies usually occur in the fallopian tubes (98%), and ovarian, cervical, uterine cornual and intraabdominal implantations can be seen.

The classic symptoms of ectopic pregnancy are abdominal pain, amenorrhea and vaginal bleeding, and the physical examination is often unremarkable at unruptured ectopic pregnancies [8]. Ultrasound and hCG are the main tools for diagnosis. Ultrasonographic findings are useful to differentiate an ectopic pregnancy from an early miscarriage. The differential diagnosis includes urinary tract infection, kidney stones, diverticulitis, appendicitis, ovarian neoplasms, endometriosis, leiomyomas, pelvic inflammatory disease, and pregnancy-related conditions. An earlier diagnosis of is possible with hCG and serum progesterone screening, transvaginal ultrasonography, and most importantly, clinical suspicion and careful history taking [9].

Expectant management, surgical or medical treatments are the treatment options for ectopic pregnancy. Expectant management may be ideal for the patients with low (<1000 IU/L) or declining hCG levels. Hemodynamically unstable patients, heterotopic pregnancy with a viable intrauterine pregnancy, lack of timely access to a medical institution for management of tubal rupture, contraindications to methotrexate and failed medical therapy are the indications for surgical treatment [10]. Patients who are hemodynamically stable, willing and able to comply with post-treatment follow-up, hCG concentration ≤ 5000 mIU/mL, and no fetal cardiac activity are optimal candidates for medical treatment with methotrexate [11].

Damage of the fallopian tubes causes the ectopic implantation of blastocyst. Because of this, recurrent ectopic pregnancy and infertility are not the unexpected results of ectopic pregnancy. Achieving a subsequent intrauterine pregnancy after an ectopic pregnancy, changes from 38 to 89 percent [12]. The incidence of recurrence of ectopic pregnancy is approximately 15 percent [12]. Recurrent ectopic pregnancy rate after salpingectomy was lower than after salpingostomy [13]. After methotrexate treatment, the recurrent ectopic rates range between 10.2% to 18.7% [14, 15]. The risk recurrence is about 30 percent after two ectopic pregnancies [16].

In conclusion it is important that, early beginning of the transvaginal ultrasonographic examinations and serial measurements of hCG levels are important in the evaluation of the patients with a history of prior ectopic pregnancy, especially when the confirmed pregnancies are detected.

References

1. Liu YL, Hwang KS, Chu PW, Ding DC. Recurrent ectopic pregnancy in the ipsilateral oviduct after prior laparoscopic partial salpingectomy. *Taiwan J Obstet Gynecol.* 2009 Dec;48(4):417-9.
2. Chang FW, Chen CH, Liu JY. Early diagnosis of ovarian pregnancy by ultrasound. *Int J Gynaecol Obstet* 2004;85:186-7.
3. Department of Health. *Why Mothers Die. The Report on Confidential Enquiries into Maternal Deaths in the United Kingdom 1997-1999.* London: HMSO, 2001.

Yildiz et al.: Recurrent ectopic pregnancy

163

This is an open-access article distributed under the terms of the Creative Common Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author(s) and source are credited.

This article may be cited as: Yildiz C, Karakus S, Bozoklu Akkar O, Yeniocak H, Cetim M. Three consecutive recurrent ectopic pregnancies: a case report. Basic Clin Sci 2013; 2: 161-164. Available at: dergipark.ulakbim.gov.tr/bcs

4. Farquhar CM. Ectopic pregnancy. *Lancet* 2005;366:583–91.
5. 2.Centers for Disease Control and Prevention (CDC). Ectopic pregnancy--United States, 1990-1992. *MMWR Morb Mortal Wkly Rep* 1995; 44:46.
6. Fylstra DL. Tubal pregnancy: a review of current diagnosis and treatment. *Obstet Gynecol Surv* 1998; 53:320.
7. Pisarska MD, Carson SA. Incidence and risk factors for ectopic pregnancy. *Clin Obstet Gynecol* 1999;42:2–8; quiz 55–6.
8. Ankum WM, Mol BW, Van der Veen F, Bossuyt PM. Risk factors for ectopic pregnancy: a meta-analysis. *Fertil Steril* 1996; 65:1093.
9. Chen CH, Lee WL, Chiu LH, Sun HD, Liu WM, Wang PH. A cohort study to evaluate the effectiveness of laparoscopic-guided local injection of etoposide in the management of women with unruptured tubal pregnancy. *Fertil Steril* 2011;96:654e8.
10. Practice Committee of the American Society for Reproductive Medicine. Medical treatment of ectopic pregnancy. *Fertil Steril* 2006; 86:S96.
11. Medical management of ectopic pregnancy. ACOG Practice Bulletin #94. American College of Obstetricians and Gynecologists, 2008.
12. Farquhar CM. Ectopic pregnancy. *Lancet* 2005; 366:583.
13. Yao M, Tulandi T. Current status of surgical and nonsurgical management of ectopic pregnancy. *Fertil Steril* 1997; 67:421.
14. Ego A, Subtil D, Cosson M, et al. Survival analysis of fertility after ectopic pregnancy. *Fertil Steril* 2001; 75:560.
15. Gervaise A, Masson L, de Tayrac R, et al. Reproductive outcome after methotrexate treatment of tubal pregnancies. *Fertil Steril* 2004; 82:304.
16. Tulandi T. Reproductive performance of women after two tubal ectopic pregnancies. *Fertil Steril* 1988; 50:164.