



Aegean Journal of Obstetrics and Gynecology

Case Report

Importance of laparoscopy in abdominal ectopic pregnancy treatment: A case report

Meriç Balıkoğlu^{a, †}, Burak Bayraktar^a, Esra Saygılı^b, Emrah Beyan^a

^a Department of Obstetrics and Gynecology, University of Health Sciences Tepecik Education and Research Hospital, İzmir, TURKEY

^b Department of Obstetrics and Gynecology, Türkan Özlhan State Hospital, İzmir, TURKEY.

ABSTRACT

Objective: Maternal mortality due to an abdominal ectopic pregnancy is eight times higher than tubal ectopic pregnancy. Greater awareness is required in the diagnosis and treatment of abdominal pregnancy.

Case Report: Thirty-seven years old multiparous patient who was admitted to the emergency room with the findings of the acute abdomen. In the evaluation, ectopic pregnancy focus was not detected clearly in the patient who had bleeding inside of the abdomen. In laparoscopic surgery of the patient, abdominal pregnancy was successfully resected on the posterior surface of the uterus.

Conclusion: Since abdominal pregnancy can be seen on the surface of spleen, omentum and appendix, since it provides a wide field of view, laparoscopic approach should be preferred in treatment.

Keywords: abdominal pregnancy; ectopic pregnancy; laparoscopic surgery

ARTICLE INFO

Doi: 10.46328/aejog.v2i3.25

Article history:

Received: 14 September 2020

Revision received 22 September 2020

Accepted 06 October 2020

© 2020 AEJOG

Introduction

Ectopic pregnancy is the implantation of the gestational sac outside the endometrial cavity. It is seen in approximately 1.5 to 2.0% and potentially life-threatening [1]. History of pelvic inflammatory disease, previous tubal surgery, and cigarette smoking, more than 35 years of age, multiple sexual partners or a previous ectopic pregnancy are associated with an increased risk of ectopic pregnancy [2]. Maternal death due to intra-abdominal bleeding is one of the complications of ectopic pregnancy, and which observed in 0.8 of 100,000 live births [3]. Although abdominal pregnancy is rare, maternal mortality due to an ectopic pregnancy are eight times higher than tubal ectopic pregnancy [4]. Greater awareness is required in the diagnosis and treatment of abdominal pregnancy. In this case, it was aimed to report the diagnostic confirmation process and laparoscopic treatment approach of abdominal pregnancy.

Case Report

The patient was admitted to our emergency department with a midline pelvic pain, mild vaginal bleeding and menstrual delay. She had not comorbidity, previous ectopic pregnancy or abdominal surgery. A thirty-seven-year-old multiparous patient had minimal vaginal bleeding during a speculum examination. In the abdominal examination, defense and rebound were detected.

The patient, whose vital signs were evaluated under emergency conditions, was hypotensive and tachycardic.

The patient's hemoglobin value was 6,6 mg/dl and the free β -hCG value was 5700 IU/L.

Transvaginal ultrasound was performed for differential diagnosis of a viable pregnancy, early pregnancy loss and ectopic pregnancy. In an ultrasonographic examination, endometrial thickness was 5 mm, uterus was normal size, and the bilateral tubes were the usual appearance, and abdominal abundant free fluid was observed. The sonography showed a heterogenic suspected area of 35x42 mm on the posterior surface of the uterus. Initially, dilation and curettage were performed. But no trophoblastic tissue was found in the uterine cavity. Erythrocyte suspension and fresh frozen plasma replacement were provided to the patient with suspected tubal abortion and abdominal pregnancy.

Laparoscopic surgery was preferred for treatment after the preliminary diagnosis. In laparoscopic observation, the bilateral adnexal fields were normal and there was a large amount of bleeding in the abdomen. After hemorrhage suction, the ectopic gestational sac which has been shown in sonography (Fig.1), resected from the outside of uterus. (Fig.2) Bipolar coagulation and primary suturing were performed for hemostasis. The whole abdomen was irrigated with 1000 ml saline. After hemostasis was achieved, the operation was finished.

Postoperatively hemoglobin was 9,2 mg/dl, and free β -hCG was 2870 IU/L. The patient was discharged without complication on the second day after surgery.

[†] Corresponding author.

E-mail: mericbalikoglu@gmail.com

Orcid Id: 0000-0001-9689-814X

Figure 1. Laparoscopic view of ectopic gestational sac



Left figure, abdominal pregnancy attached to fundal surface of the uterus;
Right figure, View after resection

Discussion

Pregnancies with unknown location may be abdominal pregnancy, which is difficult to diagnose. High quality transvaginal sonography is the most valuable evaluation for diagnosis in the hands of experts [5,6]. Magnetic resonance imaging may be helpful for the diagnosis in second trimester abdominal pregnancies [7].

Although the average gestational diagnosis week is 10 weeks for abdominal pregnancy, which is diagnosed earlier if the patient has hemorrhage [8].

Most of the abdominal pregnancies have been resulted from the reimplantation of a tubal abortion material [9]. Low β -hCG values can be misleading for clinicians.

Barel et al. detected abdominal pregnancy in a patient with a β -hCG level of 24,856 IU / L. They preferred laparoscopic resection. The gestational sac was completely dissected and removed following ureterolysis and separation of the right ureter from the specimen [10].

Abdominal pregnancy is divided into two as primary and secondary tubal abortions. Pregnancies while the fallopian tubes, ovaries and uterus are intact, the fertilized ovum is implanted into the abdomen are classified as primary abdominal pregnancy. Secondary abdominal pregnancies settle in the abdomen as a result of reimplantation after tubal abortion or rupture from the fallopian tube [11]. Because secondary abdominal pregnancies are diagnosed earlier, resection possibility is higher than primary abdominal pregnancies. When diagnosed in the second trimester, primary abdominal pregnancy management is a challenge for clinicians. In these cases, leaving the placenta in the abdomen or methotrexate treatment after resection may be considered. In our case, laparoscopic resection was possible because of the secondary abdominal pregnancy.

Due to abdominal pregnancy can be observed on the surface of the spleen, omentum and appendix, laparoscopic approach should be preferred in the treatment because it provides wide field of vision.

References

- [1] Chang J, Elam-Evans LD, Berg CJ, Herndon J, Flowers L, Seed KA, et al. Pregnancy-related mortality surveillance--United States, 1991--1999. *MMWR Surveill Summ Morb Mortal Wkly Rep Surveill Summ CDC*. 2003;
- [2] Ankum WM, Mol BWJ, Van der Veen F, Bossuyt PMM. Risk factors for ectopic pregnancy: A meta-analysis. *Fertil Steril*. 1996;
- [3] Anderson FWJ, Hogan JG, Ansbacher R. Sudden death: Ectopic pregnancy mortality. *Obstetrics and Gynecology*. 2004.
- [4] Martin JN, Sessums JK, Martin RW, Pryor JA, Morrison JC. Abdominal pregnancy: Current concepts of management. *Obstet Gynecol*. 1988;
- [5] Kirk E, Bottomley C, Bourne T. Diagnosing ectopic pregnancy and current concepts in the management of pregnancy of unknown location. *Hum Reprod Update*. 2014;
- [6] Balikoglu M, Bayraktar B, Akar MM. The effect of

ultrasonography in predicting medical treatment success in ectopic pregnancy. *Aegean J Obstet Gynecol*. 2019 Dec 29;1(1):5-7.

[7] Bertrand G, Ray C Le, Simard-Émond L, Dubois J, Leduc L. Imaging in the Management of Abdominal Pregnancy: A Case Report and Review of the Literature. *J Obstet Gynaecol Can*. 2009 Jan 1;31(1):57-62.

[8] Poole A, Haas D, Magann EF. Early abdominal ectopic pregnancies: A systematic review of the literature. *Gynecologic and Obstetric Investigation*. 2012.

[9] Hallatt JG, Grove JA. Abdominal pregnancy: A study of twenty-one consecutive cases. *Am J Obstet Gynecol*. 1985;

[10] Barel O, Suday RR, Stanleigh J, Pansky M. Laparoscopic Removal of an Abdominal Pregnancy in the Pelvic Sidewall. *J Minim Invasive Gynecol*. 2019 Sep;26(6):1007-8.

[11] Yildizhan R, Kulusari A, Adali F, Adali E, Kurdoglu M, Ozgokce C, et al. Primary abdominal ectopic pregnancy: a case report. *Cases J*. 2009;2(1):8485.