

Heterotopic Pregnancy with Tubal Rupture Accompanied with Severe Anemia: Case Presentation

Papamargaritis E, Sofoudis C*, Kotsonis C, Gkolias D, Karasaridou K, Louis K and Gerolymatos A

Department of Obstetrics and Gynecology, Konstantopouleio-Patision General Hospital, N. Ionia, Greece

Abstract

Ruptured ectopic pregnancy represents an emergency gynecological procedure. Performing the major cause of maternal death among first trimester pregnancies. Although the mortality incidence decreases, the incidence of ectopic pregnancy is constantly increasing. The simultaneously existence of endometrial and ectopic pregnancy represent a rare condition requiring specific treatment. In cases with severe anemia an urgent management is mandatory. We present a case of heterotopic pregnancy with tubal rupture accompanied with severe anemia successfully surgically treated.

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Introduction

Heterotopic Pregnancy (HP) is the simultaneous development of an intra-uterine pregnancy and ectopic pregnancy. In cases of natural cycles represents a rare condition. The incidence counts approximately 1:30,000 pregnancies [1]. A significant prognostic factor consists the presence of pelvic inflammatory disease (PID) and former tubal surgeries [2]. Due to increasing use of assisted reproduction techniques the incidence of ectopic pregnancies is still increasing [3]. The most common implantation site is in the fallopian tube and especially in its ampullary segment with incidence 80% [4]. In cases of gynecological practice an exclusion of an ectopic pregnancy by ultrasound confirmation of an intrauterine pregnancy is mandatory. The diagnostic difficulties of a heterotopic pregnancy reflect the absence of clinical symptoms. In general ectopic pregnancy with ruptured symptoms represents an emergency gynecological condition requiring immediate medical treatment. The most important tool in the diagnosis of heterotopic pregnancy represents the use high-resolution transvaginal ultrasonography [5,6]. Symptoms of abdominal pain, rebound tenderness, fluid in the pouch of Douglas and severe anemia synthesize a condition compatible with tubal rupture or active bleeding. Such cases, few in the current literature, endanger the life expectancy of the mother and the fetus [7].

Case Presentation

We present a case of a 38 year old female patient (gravida 2, para 0) admitted to our Department with fainting episode, accompanied with vaginal bleeding and abdominal pain. Gynecological history with right tubal pregnancy in 2003. She underwent salpingectomy and plastic tubal reconstruction. In 2007 underwent right tubal salpingectomy due to new episode of ectopic pregnancy. She reported episodes of vaginal bleeding and abdominal pain 40 days ago. Two weeks after her physical examination, via transvaginal ultrasound an gestational sac was detected. HCG counted 14.500 iu/L. In two days new episodes of vaginal bleeding and abdominal pain were reported. HCG counted 13.500 iu/L. No ultrasonographic sign of endometrial sac. The following day HCG counted 5.600 iu/L. During her admission a dilation of endometrial cavity was reported accompanied with fetal remnants. All the characteristics represent situation compatible with missed abortion. The pregnancy was laboratory confirmed. The Pap smear revealed no signs of malignancy. The tumor markers were in normal range. The Hct and Hb counted 33.6% and 11.1 g/dL respectively. The patient underwent therapeutic evacuation of the endometrial cavity. During her postoperative course, severe abdominal pain, abdominal irritation, decrease of blood pressure was

reported conditions suggestive with hypovolemic shock. The CT examination revealed near the liver and the spleen, inside the abdominal cavity, especially in the cul de sac, presence of free fluid with hypodense elements suggestive of hemoperitoneum followed by diaphragm elevation and free fluid inside the pleural cavity. An emergency laparoscopy was performed. Presence of ruptured left tubal pregnancy accompanied with massive hemoperitoneum was intraoperatively diagnosed. Due to the quantity of the blood assemblage a laparotomy was performed. (Hct and Hb 14.1% and 4.7 g/dL respectively) The patient refused a blood transfusion due to religious beliefs. This confrontation treated with norepinephrine and erythropoietin. The patient underwent right salpingectomy and removal of all blood assemblage. Broad spectrum antibiotics were mandatory.

The final diagnosis was histologically confirmed. The postoperative course was uneventful. The patient was discharged at the 10^{pod} (Hct and Hb 24% and 7.4 g/dL respectively) with instructions for iron use.

Discussion

Heterotopic pregnancy consists the presence of intrauterine and extrauterine pregnancy. Proper and early diagnosis decreases the intra- and postoperative complications [8]. The ectopic pregnancy is usually tubal but could be ovarian, cervical, cornual or abdominal.

The existence of heterotopic pregnancy as result of spontaneous cycles is extremely rare according the current literature [9]. The optimal management regarding a heterotopic pregnancy remains controversial. Through surgical penetration a 40% of viable fetuses have reported [10]. Many cases have confirmed the safety of laparoscopy concerning the optimal management and treatment [11]. In cases of tubal rupture with severe anemia as result of active bleeding use of methotrexate or RU486 are strictly prohibited [12]. The optimal management consists surgical penetration with immediate treatment

*Corresponding Author: Dr. Chrisostomos Sofoudis, Department of Obstetrics & Gynecology, Konstantopouleio-Patision General Hospital, N. Ionia, Ippokratous 209, 11472, Athens, Greece; E-mail: chrisostomos.sofoudis@gmail.com

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of the tubal rupture and the hemodynamic disorder respectively. Blood transfusion and hydration with crystalloid and colloid solutions are mandatory [13]. Constantly counselling and proper follow up of the patient consists essential components. Our case represents a rare condition of a heterotopic pregnancy accompanied with severe anemia due to tubal rupture properly planned and treated.

Conclusion

Heterotopic pregnancy consist a rare gynecological condition in forms of natural cycles. Accompanied with severe anemia, due to tubal rupture represents an emergency entity endangering the life expectancy of the mother and the fetus. Multidisciplinary cooperation minimizes all the intra-and postoperative complications.

Competing Interests

The authors declare that they have no competing interests.

Author Contributions

All the authors substantially contributed to the study conception and design as well as the acquisition and interpretation of the data and drafting the manuscript.

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