Available online at www.sciencerepository.org

Science Repository

Case Report

Viable Heterotopic Pregnancy in a 41-Year-Old Woman with Spontaneous Conception and a History of Ectopic Pregnancy: An Unusual Case Complicated by Postoperative Ileus

Xenophon Bazoukis*, Nancy Lepoura, Elena Hatziangeli and Savvas Argyridis

Obstetrics/Gynaecology Clinic at Makarios III Hospital, Nicosia, Cyprus

ARTICLE INFO

Article history:
Received: 6 May, 2022
Accepted: 28 May, 2022
Published: 9 June, 2022

Keywords:
Heterotopic pregnancy
ectopic pregnancy
postoperative ileus

ABSTRACT

Heterotopic pregnancy is defined by the coexistence of intrauterine and ectopic pregnancy. In our case report, a 41-year-old woman with a positive pregnancy test visited our hospital outpatient department for the first time. She was diagnosed with a viable heterotopic pregnancy, for which she underwent laparotomy and uterine curettage. Our clinical case has a prevalence of one in every 30.000 pregnancies, since it was a spontaneous conception and there was no family history of multiple pregnancies. Risk factors were medical history of a previous ectopic pregnancy, pelvic operations and her age being over forty. Despite her good recovery from the first operation, she underwent a second laparotomy with the aim to treat an obstructive ileus due to adhesions.

© 2022 Bazoukis Xenophon. Hosting by Science Repository.

Introduction

Ectopic pregnancy has a prevalence of 19.7 cases per 1000 pregnancies in North America and is the leading cause of maternal mortality. It accounts for 4% of deaths in the first trimester of pregnancy [1, 2]. The incidence of ectopic pregnancies has increased over the last 20 years as sonography has enhanced the possibility of early diagnosis. The incidence of pelvic inflammatory disease has also increased and assisted reproductive technology is used more frequently [2]. Risk factors for ectopic pregnancy include a history of previous ectopic pregnancies, the use of assisted reproductive technology and ovulation induction, pelvic inflammatory disease (mainly caused by Gonorrhea or Chlamydia), patients age, previous abdominal surgical medical history with possible adhesions, documented tubal pathology, exposure to diethylstilbestrol in utero and smoking [3]. The most usual position of an ectopic pregnancy is the fallopian tube (95%). Tubal ectopic pregnancy includes ampullary, isthmus, infundibular, cornual and interstitial position.

The non-tubal ectopic can occur at the ovary, in the cervix, within the myometrium or in an intra-abdominal position. Finally, there are three more categories of ectopic pregnancy, namely the heterotopic, persistent ectopic and pregnancy of unknown location [1, 2]. In the case of heterotopic pregnancy, ectopic and intrauterine pregnancy sacs coexist. An additional risk factor for heterotopic pregnancy is a family history of multiple pregnancies [4]. The diagnosis demands high clinical suspicion, special sonography findings and serum β-hCG levels monitoring. We present an unusual case of a 41-year-old female with a medical history of ectopic pregnancy, who came for her first visit at our hospital and was diagnosed with heterotopic pregnancy. Subsequently, we will discuss the treatment management and the follow up that the patient undertook.

Case Presentation

A 41-year-old female from the Philippines visited the outpatient department of our hospital with a positive pregnancy test. She had no remarkable health problems; she was, at that time, under no medication, she was not a smoker and no family medical history. From the gestational history, she had two children from a total number of 4 pregnancies. She had given her first vaginal birth in 1995. In 2006, she was operated for a right tubal ectopic pregnancy and her right fallopian tube was removed. In 2010, she underwent Caesarean section due to the failure of labour induction and in 2018 she had a missed abortion. According to her last menstrual cycle, she was six weeks and five days pregnant. The doctor at the outpatient department proceeded to a transvaginal ultrasound, which revealed a left ectopic pregnancy with visualized positive fetal heart rate. The above diagnosis was also

*Correspondence to: Bazoukis Xenophon, Obstetrics/Gynaecology Clinic at Makarios III Hospital, Nicosia, Cyprus; E-mail: xbazoukis@gmail.com

© 2022 Bazoukis Xenophon. *This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.* Hosting by Science Repository.
http://dx.doi.org/10.31487/j.SCR.2022.05.02

confirmed by an ultrasound specialist, who additionally reported an intrauterine mixed cystic formation about 34×31 mm.

The second finding was probably a pregnancy sac, with no embryonic pole visualized, as is evident in the ultrasound images. She was admitted to our clinic and underwent a laparotomy. After the lysis of several adhesions among the omentum, the anterior uterus wall and the posterior abdominal wall, a left tubal ectopic pregnancy sac was recognized and dissected, and the fallopian tube was ligated. After the closure of the abdominal incision, the patient was placed in a lithotomy position. Dilatation and curettage was performed in order to remove the intrauterine gestational sac. The patients' recovery was good, with no need for transfusion and no complications. Twenty-five days after her discharge from our hospital, she had an acute abdominal pain that forced her to visit the emergency department. She was admitted to the General Surgery clinic with a diagnosis of obstructive ileus. She underwent a second laparotomy for adhesiolysis and she was having a good recovery after what she was discharged from the hospital with follow up instructions.

Discussion

Heterotopic pregnancy is defined as the coexistence of an intrauterine and an ectopic pregnancy. Due to high maternal mortality, early diagnosis is critical [5]. Heterotopic pregnancy is a rare entity, with a reported incidence between 1:8.000 and 1:30.000 pregnancies, reaching as high as 1 in 3.900 pregnancies when assisted reproduction techniques are taking place [4, 6]. At the first pregnancy visit, after an intrauterine pregnancy is confirmed, the ultrasonographer should scan for adnexal masses via transvaginal ultrasound. A Doppler for suspicious masses and high clinical suspicion has to take place [7]. In our case, we first diagnosed the ectopic pregnancy, while the ultrasound specialist diagnosed the intrauterine non-viable pregnancy. The risk factors for an ectopic pregnancy in our patient were the past medical history of one ectopic pregnancy, the two gynaecological operations she already had, the presence of intra-abdominal adhesions and her age. The management of heterotopic pregnancy could be the surgical removal of the ectopic gestational sac and preservation of a viable intrauterine pregnancy, according to woman's preference [8].

On the other hand, pharmaceutical management with methotrexate for the ectopic pregnancy and concomitant dilatation and curettage for the non-viable intrauterine pregnancy could be undertaken, but there are specific criteria for that kind of management. Those criteria are the patient compliance, an ectopic sac with a size of less than 35 mm, the absence of fetal heart rate, no signs of tubal rupture, serum β-hCG levels below 5.000 IU/lt and no blood dyscrasias, renal or liver dysfunction [7]. In the case of our patient, there was a fetal heartbeat, a β-hCG level of 14.000 IU/lt and an ectopic sac larger than 35mm. Therefore, the management was the surgical removal of the ectopic pregnancy in combination with dilatation and curettage for the intrauterine non-viable pregnancy. After the surgical management, β-hCG levels were monitored weekly, until it fell below 15 iu/lt.

Consent

Written informed consent was obtained from the patient.

Conflicts of Interest

None.

REFERENCES

1. Centers for Disease Control and Prevention (1995) Ectopic pregnancy. *JAMA* 273: 533. [Crossref]
2. Prevention CfD Ca, Assisted Reproductive Technology (ART) Report (2004).
3. Ankum WM, Mol BW, van der Veen F, Bossuyt PM (1996) Risk factors for ectopic pregnancy: a meta-analysis. *Fertil Steril* 65: 1093-1099. [Crossref]
4. Cheng PJ, Chueh HY, Qiu JT (2004) Heterotopic pregnancy in a natural conception cycle presenting as hematometra. *Obstet Gynecol* 104: 1195-1198. [Crossref]
5. Siraj SHM, Wee Stekly WW, Chern BSM (2014) Heterotopic pregnancy in a natural conception cycle presenting as acute abdomen: a case report and literature review. *Gynecol Minim Invas Ther* 3:100-102.
6. Farnaghi S, Kothari A (2013) Heterotopic pregnancy: a report of two cases. *Australas J Ultrasound Med* 16: 30-36. [Crossref]
7. NICE guidelines (2019) Ectopic pregnancy and miscarriage: diagnosis and initial management.
8. Li JB, Kong LZ, Yang JB, Niu Gang, Fan Li et al. (2016) Management of Heterotopic Pregnancy: Experience From 1 Tertiary Medical Center. *Medicine (Baltimore)* 95: e2570. [Crossref]