

Spontaneous heterotopic pregnancy in a patient diagnosed with polycystic ovary syndrome

Abstract

Introduction: The presence of simultaneous pregnancies in at least two different places of implantation with polycystic ovary syndrome, it is usually a rare combination expected of infertility treatments.

Objective: This report obeys the need of informing the medical community about the possible presentations of pregnancy in infertile women.

Case description: 32 years old patient with history of polycystic ovary syndrome is admitted in the emergency department due to severe abdominal pain on the right iliac fossa, with low transvaginal bleeding, the ultrasound reports 7-week intrauterine pregnancy by length measurement cranium caudal, free fluid in the pelvic cavity, the patient is intervened due to acute abdomen data and salpingectomy is performed, the removed sample is sent to the pathology department where is analyzed and ectopic pregnancy is reported. Cerclage at week 14 is placed and a correct evolution until the end of pregnancy is observed. At the term of 38 weeks the newborn births by cesarean section.

Conclusion: In a patient with a history of polycystic ovary and infertility without treatment an ectopic pregnancy was found through ultrasound in the presence of acute abdomen and intrauterine pregnancy of 7 weeks, these represent timely findings to prevent morbidity and bring to a successful term the intrauterine pregnancy as in this clinical case.

Keywords: heterotopic pregnancy, spontaneous heterotopic, ectopic pregnancy and polycystic ovaries, spontaneous Heterotopic Pregnancy

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Background

Heterotopic pregnancy (HE) is the combination of an intrauterine and extrauterine pregnancy, its frequency is 1:30,000 spontaneous pregnancies. But it has reached reports of 0.75–1.3% with the use of assisted reproduction techniques.^{1,2}

The salpinge is the site of greatest implantation in heterotopic pregnancy; pelvic inflammatory disease, assisted reproduction techniques and ovarian hyperstimulation increase in frequency up to 1%.^{3,4}

The most common symptoms include abdominal pain, transvaginal bleeding, adnexal tumor, abdominal pain with or without evidence of peritoneal irritation, and increased uterine volume.⁵

Although they are rare, they are life-threatening if a timely diagnosis is not made, which remains a challenge, but with the ultrasound visualization of a complex adnexal mass, as well as the presence of an intrauterine pregnancy, a study and treatment approach begins directed for this pathology.⁶

Thus, the first-line examination is suprapubic and transvaginal ultrasound, which allows the diagnosis of both pregnancies, demonstrating the vitality of the intrauterine pregnancy and the site of the ectopic pregnancy.⁷

Another test may be chorionic gonadotropin levels, but it may be masked by intrauterine pregnancy.⁸

The appearance of polycystic ovary syndrome can cause hormonal imbalances, with less ovulation and can make pregnancy difficult.⁹

Emergency surgery is highly recommended, it is mainly salpingectomy and manipulation of the uterus must be minimal, in order to preserve the intrauterine pregnancy.¹⁰

Clinical case

32-year-old female patient, who is in her third pregnancy and has a history of untreated polycystic ovary syndrome with 6 months of evolution, without nutritional control and without follow-up, in addition to 2 previous abortions in the second trimester, with subsequent unsuccessful desire for pregnancy for 7 years. Presenting irregular menstrual cycles with periods of 60 days with absence of menstrual bleeding.

With this history, she went to the emergency department complaining of intense abdominal pain of two days' duration in the right iliac fossa, which was disabling, accompanied by little transvaginal bleeding, menstrual delay and with a positive urine pregnancy test. With unreliable date of last period, due to previous irregular menstrual cycles.

Physical examination shows a globose abdomen at the expense of adipose panniculus, on auscultation with decreased peristalsis, on palpation soft, with positive rebound, positive McBurney and Bloomberg points; Bimanual vaginal examination showed a 10x8cm uterus, a closed central cervix that was painful on mobilization, no adnexa could be palpated, a bulging right cul-de-sac, and the presence of little transvaginal bleeding. An abdominal/pelvic ultrasound was requested where a 7-week intrauterine pregnancy was reported due to CCL, visualizing adnexa apparently without alterations, without description of the appendicular area and with the presence of free fluid.

It was decided to admit her with a diagnosis of pregnancy at 7 weeks of gestation by ultrasound and probable acute appendicitis, but within her in-hospital evolution, data of acute abdomen were observed and she began with symptoms of low output, so surgical intervention with exploratory laparotomy was decided. The following

findings were reported: hemoperitoneum of 400cc and a mass in the right salpinges measuring 4x5cm (Figure 1) with right and left ovaries without alterations, as well as an appendix with macroscopically normal characteristics (Figure 2).

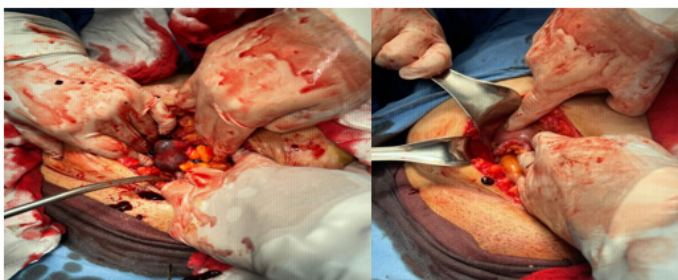


Figure 1 Mass in right salpinges.

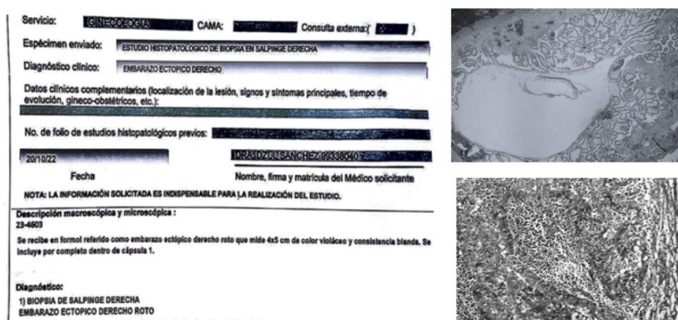


Figure 2 Appendix macroscopically without alterations.

It was decided to perform a right salpingectomy in the presence of a tumor mass and the specimen was sent to pathology (Figure 3) where an ectopic pregnancy was reported. Surgical event ends with hemodynamically stable patient maintaining adequate post-surgical evolution.

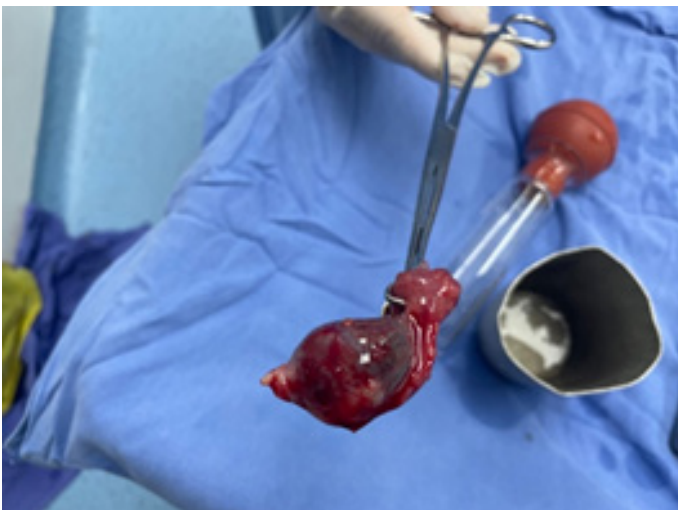


Figure 3 Sending the specimen to pathology that reported ectopic pregnancy in the first trimester.

She was discharged with continuing surveillance with a viable pregnancy, requiring cerclage placement at week 14 due to the obstetric history already mentioned, with adequate evolution until term, at 38 weeks the newborn was born by cesarean section due to persistence of a variety of posterior occipital position and expulsive period. prolonged, reporting the following findings: live male newborn, with Apgar 8/9, weight 3,070 g, height 49 cm.

Discussion

Heterotopic pregnancy is a very rare pathology in the general population, where the most common error is delay in diagnosis. A heterotopic pregnancy after the diagnosis of an intrauterine pregnancy leads to possibly catastrophic outcomes.

Therefore, it is a condition in which intrauterine and extrauterine pregnancy occur simultaneously, in this clinical case the acute pain in the lower abdomen and the results of the ultrasound forced timely attention.

The ultrasound report that raised the suspicion of the presence of heterotopic pregnancy was that in the anterior portion of the fundus in the right adnexa, an image with crescent-like morphology measuring 10x4 mm was identified as avascular after the application of color Doppler. And the right ovary with measurements of 52x29x42mm with a volume of 33.3cc

What distinguishes it from other similar cases is the presence of polycystic ovary, which was only found in a 23-year-old woman in the literature consulted, and its finding in the ampulla of the right fallopian tube was the same as in our report. Development of the fetus was normal and at 39 weeks of gestation, the patient gave birth naturally to a healthy child.¹¹

As in the cases described, it has been observed that 95% occur in the fallopian tube, but it has also been found in the cervix, the scar from a previous cesarean section and the interstitial segment of a fallopian tube, ovary, peritoneal or abdominal cavity.¹²

Likewise, the diagnosis is made between 5 and 8 weeks in 70%, where expectant management can be done in those patients who do not present symptoms where the unruptured ectopic embryo has a limited craniocaudal length.¹³

Generally, less invasive procedures should be preferred for better intrauterine pregnancy outcome. Using laparoscopy (salpingostomy, salpingectomy) is considered the treatment of choice due to better results and fewer harmful effects for the intrauterine live pregnancy.¹⁴

Conclusion

A clinical case of heterotopic pregnancy was reported that, unlike others, presented with polycystic ovary syndrome, presenting as an acute abdomen and whose resolution was like that of pregnancies with this diagnosis, with good progress for both the mother and the fetus.

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Conflicts of interest

The authors declare that they have no competing interests.

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