

Ruptured primary sigmoidal pregnancy; a case report

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ABSTRACT



Abdominal pregnancy is a very rare variant of ectopic pregnancy, generally with high maternal mortality and morbidity. We present in this paper the case of 17-year-old woman who presented with abdominal pain, hemodynamically unstable and high beta hCG levels. An emergency laparotomy was performed and established the intraoperative diagnosis of ruptured sigmoidal pregnancy. Complete surgical excision of sigmoidal pregnancy was possible, without lesions related to the sigmoid colon wall/ lumen. The patient was discharged postoperatively on 3rd day, having a favorable evolution and without complications. Abdominal pregnancy is an extremely rare condition that can be life-threatening, so that a reliable index/ tool of suspicion and diagnosis should be available.

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Introduction

Generally, the pregnancy that occurs in other places than the endometrial layer of the uterine cavity is called ectopic pregnancy. The incidence of ectopic pregnancy in literature is about 2% [1].

According to the implantation site, the location of abdominal pregnancies most commonly refers to the fallopian tubes in 95% of the subjects. In 5% of cases, ovarian, corneal, cervical, interstitial, heterotopic, abdominal or caesarean implants are encountered [2]. Data on abdominal pregnancies show that they appear in 1.9 / 10,000 pregnancies, and in 9.2 / 1,000 ectopic pregnancies [3]. The maternal mortality rate was observed to be 7.7 times higher than tubal pregnancies, and 90 times higher than the intrauterine pregnancies [4]. Abdominal pregnancies often present a diagnostic challenge because of a difficulty in determining the implantation site, especially in the case of early pregnancy. As a consequence, any pregnancy suspected to be ectopic/ abdominal should be closely monitored (using especially abdominal ultrasound) in all patients, until the intrauterine gestation is confirmed.

In this paper it is described the case of a patient with an early abdominal pregnancy who was successfully treated through an emergency laparotomy and blood transfusions.

Case Report

The patient is a 17-year-old woman, Gravida 2, para1, who was admitted to the emergency room with a complaint of lower cramping abdominal pain, which started about two days before.

Among the patient's history, an uncomplicated caesarean section for her previous pregnancy was noticed. Her general condition was generally medium to bad, being conscious but agitated. The physical examination revealed the suprapubic and lower right quadrant sensitivity, associated with acute signs of peritonitis. She was hemodynamically unstable. The patient was hemodynamically unstable. The blood pressure was 75/35 mmHg, hemoglobin 6.5 mg/ dL and beta hCG was 6834 mIU/ mL. A fast ultrasound in the emergency room showed no evidence of intrauterine pregnancy, but revealed severe and complex fluid collection in the abdominal area. Bilateral ovaries and tubas could not be clearly observed

due to clots. The above findings were related to a ruptured ectopic pregnancy. According to the patient's symptoms and clinical data presented, the patient was taken to the operating room for an emergency laparotomy. The intraoperative examination revealed large blood clots in the abdomen. The uterus, bilateral tubes and ovaries were normal. There were no signs of tubal or ovarian pregnancy, based on the normal-looking anatomy of the pelvis. An active bleeding area of about 3 cm with trophoblastic invasion was discovered in the sigmoid colon meso (Figure 1).

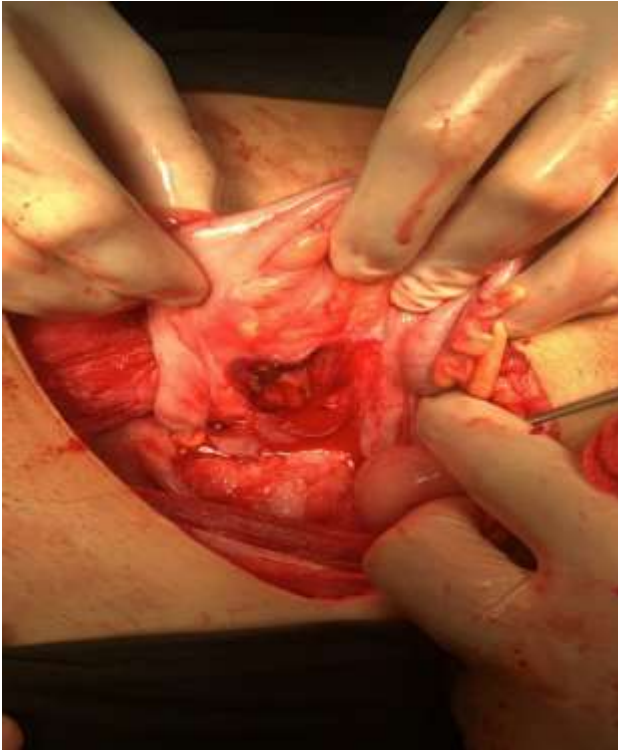


Figure 1. Active bleeding area on mesosigmoid

On this patient, our diagnosis of presumption was represented by abdominal ectopic pregnancy. She underwent a general surgery intervention and the excision was complete. There were no incidents or accidents during the intervention, so that no damage to the sigmoid colon lumen or vascular events were registered. The estimated blood loss was about 2000 ml, and two units of blood were transfused during surgery and two more units after the surgical intervention. The patient evolved postoperative favorably/ without complications, and was discharged to his home on the third day. The beta HCG level before discharge dropped to 683 mIU/ ml. On the 15th day after the surgery, beta HCG values were observed as negative. During the post-operative period, the patient did not take methotrexate. Histopathological examination confirmed the presence of chorionic villus, in association with blood clots and elements related to the conception process.

Discussions

Abdominal pregnancy is a rare obstetric complication in which the mother's death may occur in the absence of specific treatment, with serious implications for the child. Diagnosis of abdominal pregnancy is difficult and often established intraoperatively. Therefore, a high suspicion index is required to be able to establish a correct presumptive diagnosis. The criteria used to diagnose a primary abdominal pregnancy were first defined by Studdiford in 1944 [5]. To classify a pregnancy as abdominal, he stated that the following criteria must be met: (1) normal tubes and ovaries, (2) uteroperitoneal fistula, (3) peritoneal surface-only pregnancy and (4) no evidence of secondary implantation after the first primary tubal nidation.

Laparoscopic approach and methotrexate treatment are possible therapeutic options in early abdominal pregnancies. Cases treated through laparoscopic approach are described in the literature. For stable patients, the laparoscopic approach is a good alternative. The combination of these procedures is also possible. Abdominal pregnancy may be discovered in the early period, as well as cases diagnosed shortly before the term have been reported in the literature. A massive bleeding usually occurs when attempts to remove the placenta, being one of the most challenging problems encountered during laparotomy for abdominal pregnancy [6]. It is recommended for placenta to remain in its best/ sure location, all blood flow to the placenta being secured with minimal intraoperative and postoperative risks [6, 7]. However, the hepatic and splenic areas still represent regions where bleeding complications could be high. In such areas bleeding can be even life-threatening. Therefore, the diagnosis of abdominal pregnancy should be made in early weeks as many times as possible, and risky pregnancies should be closely monitored.

As a result, abdominal pregnancy is often a missed or delayed diagnosis. A high clinical suspicion index is required for a correct and pre-coe diagnosis. Unfortunately, only 40% of early abdominal pregnancies are diagnosed before the surgery [8]. A pre-coe diagnosis is possible where the prenatal ultrasound helps identifying cases of ectopic pregnancy. We successfully treated this patient with emergency laparotomy and blood transfusion.

Conclusions

Abdominal pregnancy is a rare obstetric complication in which the mother's death may occur in the absence of the specific treatment, and with variable/ serious implications for the child. The diagnosis of abdominal pregnancy is often difficult, and sometimes it is even established intraoperatively. Therefore, a reliable diagnostic indicator (a high suspicion index) is needed to establish the diagnosis in

a timely manner, to be able to start the right treatment. We recommend laparotomy for ruptured ectopic pregnancies, especially for cases that are hemodynamically unstable.

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