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CASE REPORT

PRIMARY ABDOMINAL PREGNANCY: A CASE REPORT

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INTRODUCTION

An ectopic pregnancy (EP) can be defined as an abnormality of the implantation site. In the case of EP, the fertilized ovum is located somewhere outside but not in the uterine cavity. The incidence of EP has been reported in 2% of all pregnancies. Ninety-five percent of all EP are located in the fallopian tube. Moreover, 3.2% of all EPs are ovarian, and 1.3% show abdominal locations of ectopic formations [1]. The extent of surgery depends on the site of implantation and the damage caused by EP, and can sometimes lead to loss of organs or structures, usually a salpingectomy [2]. Timely diagnosis and appropriate treatment are necessary to avoid severe maternal complications caused by EP, such as maternal mortality in delayed detection [3].

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CASE REPORT

A 23 years-old gravida-II, para I, with a history of cesarean delivery (CD) in her previous pregnancy, presented to the emergency department with symptoms of low abdominal pain, vomiting, and abnormal (prolonged) vaginal bleeding. The patient's last menstrual period was six weeks and five days before presentation. On physical examination, she was found to be normotensive (BP-110/60/mmHg). The speculum and bimanual exam showed a menstrual-like bleeding pattern. Urgent ultrasonography (TV-US) revealed that the endometrial thickness was 10 mm, no pathological manifestations were identified in the bilateral ovaries, and minimal fluid was observed in the left para-ovarian area. TV-US showed that there was a suspicious formation in the left adnexal area. The patient's initial laboratory results showed a β-hCG level of 8513 IU/L and a hemoglobin (Hgb) level of 10.8 g/dL. The patient, with the preliminary diagnosis of left tubal ectopic pregnancy, was taken under observation in the gynecology emergency room (ER) for close monitoring. During 2 hours of observation in the ER, the patient developed symptoms of hypotension. TV-US revealed increased fluid in the Pouch of Douglas (POD), Hgb decreased to the level of 9.2 g/dL, and prompt surgical intervention was carried out.

DISCUSSION

In contrast to tubal EP, an abdominal ectopic pregnancy (AEP) may be undetected until later weeks of pregnancy. Cases of term abdominal pregnancy with a viable fetus delivered through an abdominal incision have been reported [4]. The location of the ectopic formation in AEP usually occurs in the pelvis or highly vascularized areas such as the liver and mesentery [5, 6]. Implantation of EP masses into the abdominal cavity next to large vessels or an organ with a high blood supply may cause massive blood loss and require surgical intervention due to the high rate of maternal mortality [7]. According to Studdiford criteria (Figure 1), we defined our case as primary AEP. In the present case, the conception mass was attached to the posterior wall of the uterus (left broad ligament), located in the isthmic part of the uterus, and it showed an invasion of the left uterosacral ligament. As it is known, this region is highly vascular and has a topographic location close to the ureter and uterine artery [8, 9].

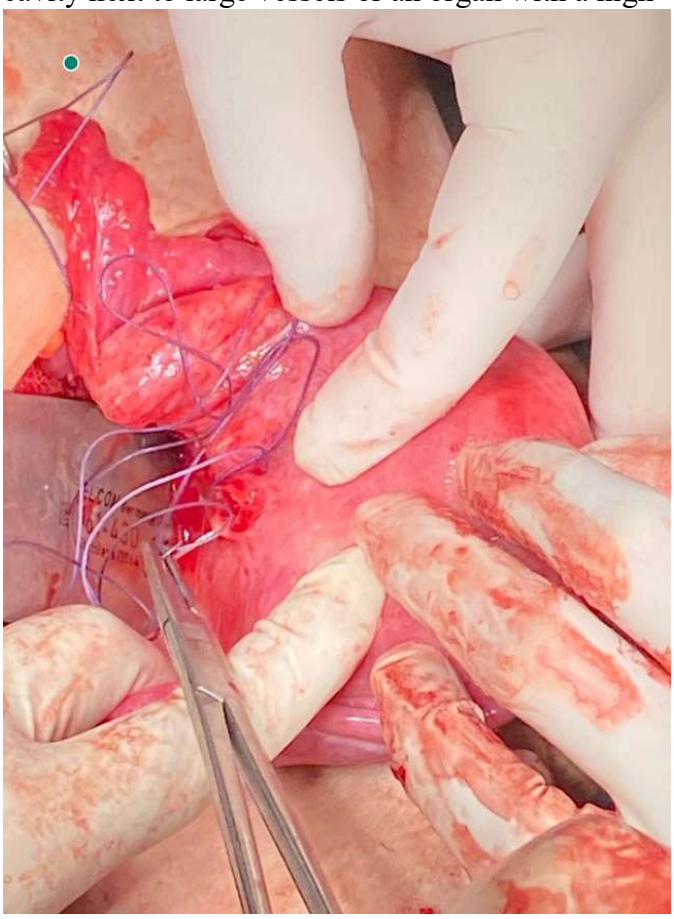

Figure 1. Perioperative view of ectopic mass: According to Studdiford criteria (Studdiford WE: Primary peritoneal pregnancy. Am J Obstet Gynecol. 1942, 44: 487-491), the tubes and ovaries exhibit a normal appearance, with both being bilateral. Secondly, there is a noted absence of a uteroplacental fistula. Lastly, the attachment has been observed solely on the surface of the peritoneum early enough in pregnancy to exclude the possibility of secondary implantation.

Fessehaye et al. describe a case of AEP with bowel injury, which was unpredictable. The authors emphasized the importance of a multidisciplinary approach. They advocated that experienced general surgeons should always be in attendance before planned laparotomy [10]. In the case of AEP, if there is a suspicion of trophoblastic invasion into the vessels or adjacent organs, to avoid masıve bleeding and damages, medical treatment can be added to the surgical intervention. In our case, a single dose of systemic MTX was administered after gentle excision to avoid injury to adjacent organs. The combination of treatment regimes in the present case shows rapid recovery and minimizes complications due to surgery.

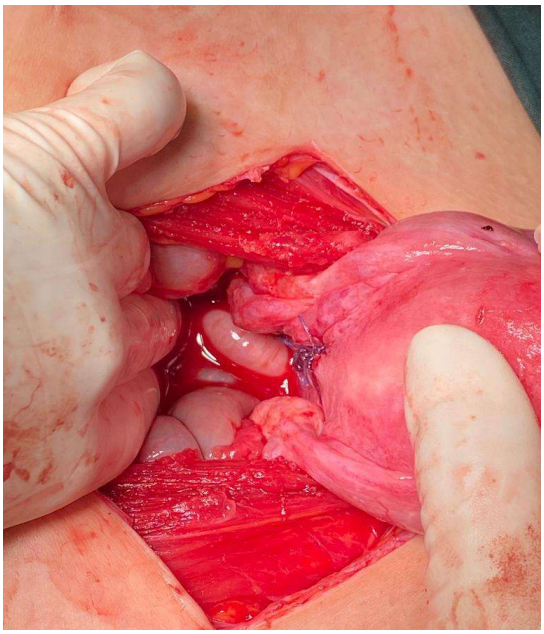

Figure 2. Perioperative hemorrhage view: Surgery revealed a significant hemoperitoneum (1000cc was evacuated); the uterus, bilateral ovaries, and fallopian tubes were intact. Erythrocyte Suspension (ES) transfusion was performed because the patient's perioperative control Hgb decreased to 7.1 g/dL. An irregular bleeding tissue 3 × 4 cm in size was observed to be attached to the POD. Deep excision of conception mass was attempted, but since it was anatomically close to both the uterine artery and the ureter, in order to minimize damage to adjacent organs, an organ-preserving approach was performed. Once the tissue had been removed as much as possible and the bleeding had been controlled, medical treatment (with methotrexate/MTX) was planned. The removed tissue was taken for histopathological examination.

Figure 3. Postoperative view of the repaired area: During the 24-hour postoperative period, vital signs were stable, and Hgb (10.1 g/dL) levels did not decrease. MTX was administered to the patient 1 hour after the surgery. No pathology was observed in the ultrasonography of the urinary system, and the collecting systems were normal in width. The control value of beta-β-hCG measured on the third day after MTX administration was 316 IU/l, and the β-hCG value on the seventh day was determined as 69 IU/l. The histopathological report of the tissue obtained from the POD confirmed the products of conception.

In conclusion, AEP should be managed to preserve fertility and prevent damage to adjacent organs. In AEG with appropriate preparation, in addition to extensive surgery, to avoid damage to the adjacent organs, the option of MTX treatment, which reduces the proliferation of trophoblastic tissue, should be considered.

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