Case Report

Eurasian Journal of Critical Care

Hemorrhagic Shock Due to Tubal Ectopic Pregnancy Following Curettage: A Case Report

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Abstract

Ectopic pregnancy occurs when a blastocyst implants outside the uterine cavity, most commonly in the fallopian tube. Heterotopic pregnancy refers to the simultaneous presence of intrauterine and extrauterine gestations. The presence of an intrauterine pregnancy often masks the ectopic component, making diagnosis challenging. A ruptured ectopic pregnancy can cause intra-abdominal bleeding and shock. Here, we present a case of heterotopic pregnancy in a patient who underwent curettage for an unintended pregnancy and subsequently developed hemorrhagic shock, along with a review of the relevant literature.

Keywords: Heterotopic Pregnancy, Ectopic Pregnancy, Hemorrhagic Shock, Curettage, Salpingectomy

Introduction

Ectopic pregnancy is defined as implantation of the blastocyst outside the endometrial cavity (1). The fallopian tube is the most common site, accounting for about 96% of cases (2). Ectopic pregnancy constitutes approximately 1–2% of all pregnancies (3), but the incidence rises to 6–16% among reproductive-age women presenting to emergency departments with abdominal pain or vaginal bleeding. Thus, ectopic pregnancy must always be considered in the differential diagnosis of such cases. It accounts for roughly 4% of all pregnancy-related deaths (4). Without early diagnosis, complications such as rupture, internal bleeding, and hemodynamic instability frequently occur. Heterotopic pregnancy describes the coexistence of intrauterine and extrauterine pregnancies. Although rare in natural conceptions (0.003–0.005%), the incidence increases to 0.1–1% with assisted reproductive technologies (ART), particularly in vitro fertilization (IVF) (5). Because the intrauterine pregnancy often conceals the ectopic component, heterotopic pregnancy is difficult to diagnose (6). In this report, we describe a patient who developed hemorrhagic shock due to a heterotopic pregnancy after curettage for an unintended pregnancy.

Case Report

A 26-year-old woman presented to our emergency department with abdominal and lower back pain. The patient gave written consent for publication of this case.

She had no history of chronic disease. A few days earlier, she had undergone uterine curettage for an unintended pregnancy at a private clinic and had been prescribed oral antibiotics. She reported minimal vaginal bleeding. On examination, tenderness was noted in the lower abdominal quadrants. Laboratory findings revealed Hb: 11.6 g/dL, WBC: 23.67 K/uL, and CRP: 0.4 mg/dL. Because of persistent abdominal pain and the need to exclude potential complications of recent curettage, we performed a contrast-enhanced abdominal CT (Figure 1). The radiology report described mild uterine edema and heterogeneity, enlargement of the left ovary, and a 2×2 cm cystic lesion adjacent to the left fallopian tube.

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e-mail: onuralpgsl139@hotmail.com
• **Received:** 18.08.2025 • **Revision:** 28.08.2025 • **Accepted:** 30.08.2025
DOI: 10.55994/ejcc.1613104

Cite this article as: Onuralp Calıskan, Aysegul Akcebe, Tufan Akin Giray, Ali Saglik, Tarik Ocak. Hemorrhagic Shock Due to Tubal Ectopic Pregnancy Following Curettage: A Case Report. Eurasian Journal of Critical Care. 2025;7(2): 47-49.

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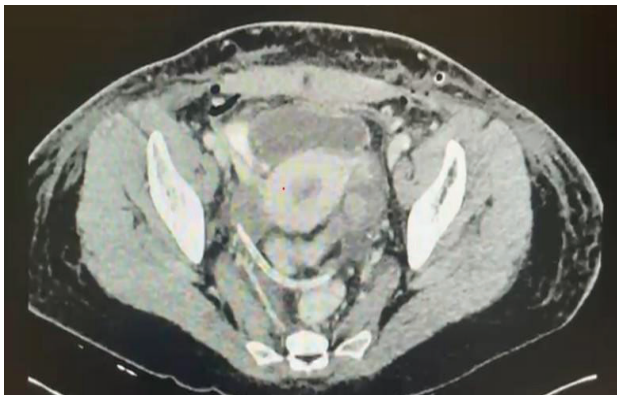

Figure 1. Axial view of the contrast-enhanced abdominal CT showing cystic-like lesion near the left fallopian tube.

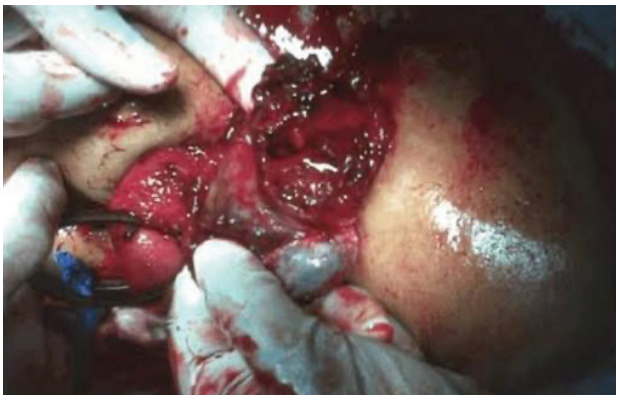

Figure 2. Intraoperative image revealing massive hemoperitoneum and a ruptured left tubal ectopic pregnancy.

We admitted the patient for observation to our emergency medicine departement and requested a gynecology consultation. Within two hours, her abdominal pain worsened, accompanied by dizziness and near-syncope. Initially, her blood pressure was 130/70 mmHg with a heart rate of 105 bpm. During near-syncope, her blood pressure dropped to 75/45 mmHg and heart rate increased to 137 bpm. Abdominal examination revealed acute abdomen findings. Repeat laboratory results showed β-hCG: 12,015 mIU/mL and Hb: 6.0 g/dL. We performed blood typing and crossmatching. In the emergency department, she received 2 units of packed red blood cells and 2 units of fresh frozen plasma after seeing decrease in her hemoglobin levels.

Bedside ultrasonography revealed a 90 hemorrhagic fluid collection in the pouch of Douglas**,** which had not been present on the CT two hours earlier. The presence of free fluid on ultrasonography in the setting of hemodynamic instability, a sudden hemoglobin drop, and acute abdomen findings strongly indicates intra-abdominal bleeding. We urgently recalled the gynecology team. They initially planned hematoma evacuation via vNOTES (vaginal natural orifice transluminal endoscopic surgery). However, laparoscopy revealed massive intra-abdominal bleeding, prompting conversion to laparotomy. We evacuated the hemoperitoneum. The uterus, bilateral ovaries, and right fallopian tube were intact, but the left fallopian tube was ruptured. Active bleeding originated from a ruptured left tubal ectopic pregnancy (Figure 2). We performed a left salpingectomy and achieved hemostasis. The procedure was completed successfully, and the patient was discharged on postoperative day 4 in stable condition.

Discussion

This case illustrates a tubal ectopic pregnancy presenting with hemorrhagic shock after spontaneous conception and curettage. An intrauterine pregnancy had been confirmed earlier, and curettage was performed. However, the subsequent onset of shock revealed an overlooked tubal ectopic pregnancy. This highlights how heterotopic pregnancies—although rare—are easily missed in clinical practice (7).

Heterotopic pregnancy refers to the simultaneous occurrence of intrauterine and extrauterine gestations. Its incidence is approximately 1 in 30,000 in natural cycles but rises to 1 in 100 with ART (12). In our patient, removal of intrauterine tissue likely led the physician to exclude ectopic pregnancy, a common diagnostic pitfall in heterotopic cases. This raises an important question: could careful evaluation of adnexal structures at the initial presentation have revealed the ectopic component earlier?

Modern ultrasonography and transvaginal assessment (8) can detect signs of ectopic pregnancy, such as adnexal masses, the “ring of fire” sign (9), or free pelvic fluid. Because ectopic pregnancy is uncommon, clinicians often evaluate extrauterine structures less thoroughly once intrauterine pregnancy is confirmed. In our patient, this practice likely delayed the diagnosis. Heterotopic pregnancy often presents with nonspecific symptoms. Post-curettage abdominal pain, minimal vaginal bleeding, and low β-hCG levels can mislead clinicians toward alternative diagnoses such as cervical trauma, uterine perforation, or incomplete abortion (10). However, rapid hemodynamic deterioration and worsening abdominal tenderness mandate reconsideration of the diagnosis. For this reason, clinicians must always examine adnexal regions in patients presenting with abdominal pain or shock after abortion, curettage, or intrauterine pregnancy (11).

Kajdy et al. described a case of heterotopic pregnancy diagnosed at 26 weeks of gestation,showing that intrauterine pregnancy can delay detection of the ectopic component for an extended period (12). Like in our case heterotopic pregnancy diagnosed only after intra-abdominal bleeding occurred. These cases emphasize the need to view heterotopic pregnancy as a real clinical entity rather than a theoretical possibility.

This case demonstrates that persistent or new-onset abdominal symptoms after curettage may indicate rare but life-threatening conditions such as heterotopic pregnancy. Although infrequently reported, delayed diagnosis carries a high mortality risk.

Conclusion

Clinicians should always consider heterotopic pregnancy in patients presenting with persistent abdominal pain after curettage, even if an intrauterine pregnancy has been documented. Inadequate evaluation of adnexal regions may delay diagnosis and lead to life-threatening complications such as hemorrhagic shock. Early recognition and prompt surgical intervention are essential to achieve favorable outcomes.

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