

Case Report

Broad ligament ectopic pregnancy with full-term live birth: a rare case report from Syria

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Abstract

Ectopic pregnancy, the implantation of a fertilized zygote outside the uterine cavity, presents with abdominal pain and vaginal bleeding. Diagnosis relies on clinical signs, and treatment involves surgery or methotrexate in selected cases. A 24-year-old woman at 37 weeks of gestation underwent elective cesarean delivery under general anesthesia, revealing an unexpected broad ligament ectopic pregnancy. The live fetus and placenta were successfully delivered without complications. The study reports a rare asymptomatic broad ligament ectopic pregnancy until 37 weeks, diagnosed by laparotomy—treatment involved removing the ovary and placenta and preserving the uterus. A healthy male baby and mother recovered well. This rare ectopic pregnancy, with placental implantation in the broad ligament, resulted in a successful cesarean delivery of a healthy infant and complication-free recovery, highlighting the importance of timely diagnosis and skilled surgical intervention.

Keywords: case report; ectopic pregnancy; broad ligament; cesarean delivery; placenta; pregnancy diagnosis

Introduction

Ectopic pregnancy, defined as the implantation of a fertilized zygote outside the uterine cavity, poses a diagnostic challenge for women with abdominal pain and vaginal bleeding [1]. Common symptoms include missed periods, abdominal pain, nausea, and shoulder pain, with clinical signs such as pallor and pelvic mass, where the "chandelier sign" is notable [2]. Surgical intervention is usually required, although methotrexate is being investigated for specific cases where surgery fails [3, 4]. If not diagnosed and treated promptly, ectopic pregnancy can lead to severe complications and increased mortality [5]. We report a rare case of broad ligament ectopic pregnancy, leading to cesarean delivery at 37 weeks, with a healthy male fetus found outside the uterus.

Case presentation

A 24-year-old female was admitted to the maternity unit at 37 weeks of gestation (G3P1) for an elective cesarean delivery. All laboratory tests were normal, positive for RhD+,

no family history, two prior cesarean deliveries, Mebeverine's medical history for spasms during pregnancy, and no bleeding. The patient did not receive any follow-up care during her pregnancy. General anesthesia was used to plan a cesarean section. When the baby was delivered, it was surprising to find that the pregnancy was outside the uterus. On the lateral side at the expense of the broad ligament, a live fetus was extracted, and the placenta was removed without adhering to the intestine, fallopian tube, or omentum. The gestational age was measured at 12 weeks. The woman and her kid were released from the hospital in good health, the abdomen was correctly closed, and there were no post-operative issues, such as acute bleeding.

Discussion

Ectopic pregnancy occurs when the blastocyst implants somewhere other than the endometrium [6]. It is considered to occur in around 1 out of every 300 ectopic pregnancies [7]. It is quite uncommon to experience nontubal ectopic pregnancy, particularly abdominal ectopic pregnancy [8]. As a subtype of abdominal

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pregnancy, broad ligament pregnancy was explained briefly in our instance. This diagnosis was made based on the anatomical position of the ectopic pregnancy, as defined in the literature [8]. In the current instance, the location of broad ligament pregnancy is intermediate between the uterine side, the lower fallopian tube, the upper pelvic floor, and the pelvic wall. Between the sixth and tenth week of gestation, patients with ectopic pregnancy typically experience pain and vaginal bleeding, with up to 20% of women presenting with shoulder tip pain, syncope, or shock and over 75% experiencing abdominal pain. It is to note that recent reports indicate that ~9% of women with ectopic pregnancy are asymptomatic, and one-third does not exhibit any clinical symptoms [9]. In our instance, the patient was part of this asymptomatic group, as she did not show any symptoms of shock, vaginal bleeding, or pain during pregnancy. Ultrasonography should be the first line of therapy when a woman has symptoms in the first trimester of her pregnancy, and if the results are not clear, serum beta-hCG should be measured. Fetal viability can be monitored up until birth; however, the most typical gestational age range for the identification of an ectopic pregnancy is between 6 and 10 weeks [10]. Our patient's ectopic pregnancy went undetected for 37 weeks of gestation, at which point a laparotomy was performed to confirm the diagnosis. The location of ectopic pregnancy and the patient's state determines the best course of care. There is no effective cure for ectopic pregnancy and various surgical procedures and medical therapies are employed in the treatment of this illness. Methotrexate is the preferred medication therapy [11]. In our situation, the ectopic pregnancy was treated by a laparotomy with the total removal of one ovary and the placenta. In contrast, the uterus and other ovaries were left intact to preserve the woman's ability to have children in the future. These pregnancies may cause severe bleeding and be undiagnosed until a later gestational age, with reports indicating a 20% maternal death rate; placental abruption can produce catastrophic complications at any stage [12], with a perinatal death rate ranging from 40% to 95% [13]. Therefore, early detection is critical and required. Due to a broad ligament ectopic pregnancy, the patient did not experience severe bleeding or placental abruption during delivery. Additionally, the surgical team's knowledge and skill were demonstrated by the placenta's removal without problems or adhesions to surrounding organs. Fetal abnormalities are among many challenges a newborn may experience [14], and it is extremely uncommon for a pregnancy with broad ligaments to be delivered to term and give birth to a living child [15]. In our instance, a normally developing male baby was delivered, and he and his mother were released from the hospital in excellent health.

Conclusion

This rare case of ectopic pregnancy involved placental implantation in the broad ligament. A cesarean section successfully delivered a healthy baby, with the placenta completely removed and no adhesions to surrounding structures. The absence of severe bleeding highlighted the surgical team's skill, leading to the mother and newborn's safe discharge.

Conflict of interest statement

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