

Full-term Live Secondary Abdominal Pregnancy: A Rare Case Report

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ABSTRACT

Background: Abdominal pregnancy is defined as pregnancy in the peritoneal cavity, excluding the tubes, ovary, and broad ligament. It is a rare and a life-threatening condition with an increased risk of maternal and perinatal mortality. It can be primary or secondary. Primary abdominal pregnancy can be differentiated by using Studdiford's criteria which include that the tubes and ovaries are normal at laparotomy, no evidence of uteroperitoneal fistula, and the presence of pregnancy closely related to the peritoneal surface and early enough to eliminate the possibility of secondary implantation after primary tubal nidation whereas in secondary abdominal pregnancy occurs following an extrauterine tubal pregnancy that ruptures or aborts and gets re-implanted within the abdomen. Here, we present a rare case of full-term live secondary abdominal pregnancy which was referred to us at SN Medical College, Agra, who was a 22-year-old primigravida and gave birth to a healthy female child of 2.7 kg in which placenta was removed after ligating the cornual stump, and left-sided salpingectomy was performed.

Keywords: Abdominal pregnancy, Laparotomy, Tubal pregnancy.

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INTRODUCTION

In ectopic pregnancy, an extrauterine abdominal pregnancy is a very rare form where implantation occurs within the peritoneal cavity excluding the ovary, fallopian tube, and broad ligament. It is estimated to occur in 1 out of 10,000 to 30,000 pregnancies.^{1,2} Despite the use of routine antenatal ultrasound, its diagnosis is frequently missed.³ It is extremely important to detect an extrauterine abdominal pregnancy because of the associated maternal mortality, which is higher than ectopic and intrauterine pregnancy. The factors that may influence the possibility of fetal survival are believed to be the site of implantation and availability of vascular supply. Full-term abdominal pregnancy carries a risk of hemorrhage, disseminated intravascular coagulation, bowel obstruction, and fistula formation. Newborn survival is also affected, and there is increased perinatal mortality.

CASE DESCRIPTION

A 22-year-old female was admitted in the labor room of the Department of Obstetrics and Gynaecology, SNMC, Agra, with complaints of 9-month amenorrhea and pain in the abdomen since morning. The patient was referred from the primary health center and was a primigravida with transverse lie.

Her general condition on examination was good. Her pulse was 92 beats per min, BP-156/100 mm of Hg, the patient did not know her LMP, and her menstrual history was not significant. She had a past history of vague dull pain in the abdomen. On per-abdomen examination, uterine height was 32 weeks, lie was transverse, and fetal heart rate was regular (136 beats per minute). On per-vaginal examination, the cervix was 1.5 cm dilated, uneffaced, posterior in position, the presenting part could not be made out, and the pelvis was adequate. All the blood and urine investigations were within normal limits. Her last USG showed a single live fetus of 35 weeks, in transverse lie with anencephaly, posterior placenta, and adequate liquor.

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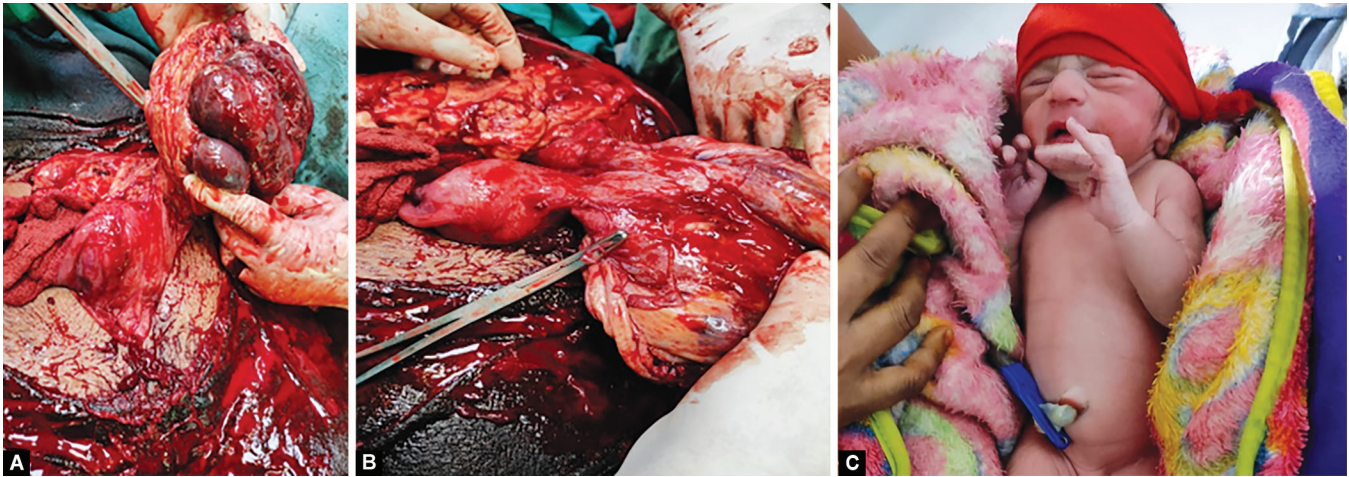
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The decision of emergency LSCS was taken due to transverse lie, blood was sent for grouping and cross-matching before the patient was taken to the operation theater with written and informed consent. The patient was given spinal anesthesia, and self-retaining catheter was inserted. After opening the abdomen, the amniotic sac was seen protruding in the peritoneal cavity. The membrane was ruptured, and a baby female child of 2.7 kg was delivered as breech and handed over to the pediatrician. There was profuse hemorrhage just after the delivery of the baby.

On exploration, the placenta was found adherent to the omentum and intestine. Fortunately, a senior gynecologist was present and she immediately joined the case. The demand of blood products was sent to a blood bank. A surgeon call was sent. The placenta was separated from the omentum and intestine as much as possible by the surgeon, and hemostasis was achieved by the application of multiple hemostatic sutures. The pelvis was explored, the uterus was 6–8 weeks in size and intact, and the placenta was originating from the left-sided cornua. The right-side tube and both ovaries were healthy. So secondary abdominal



Figs 1A to C: Placenta adhered to the omentum and intestines, a healthy female baby of 2.7 kg after cesarean

pregnancy was diagnosed. The placenta was removed after ligating the cornual stump, and left-sided salpingectomy was performed. Intraoperative 1-unit packed cell was transfused. The drain was inserted and the abdomen was closed. Postoperatively, 1-unit packed cell was transfused. The patient withstood the procedure well. The patient and healthy baby were discharged at day 8 postoperatively (Fig. 1).

DISCUSSION

Beyond the second trimester, an extrauterine abdominal pregnancy with a viable fetus is an extremely rare condition. The two types of extrauterine abdominal pregnancy are primary abdominal pregnancy that refers to pregnancy where implantation of the fertilized ovum occurs directly in the abdominal cavity, and the fallopian tubes and ovaries are intact, whereas secondary abdominal pregnancy occurs following an extrauterine tubal pregnancy that ruptures or aborts and gets re-implanted within the abdomen.

In extrauterine abdominal pregnancy, the patients typically complain of persistent abdominal and/or gastrointestinal symptoms. Diagnosis of this condition is frequently missed, with only a few cases diagnosed during the antenatal period. In our case, the diagnosis was missed and misinterpreted as intrauterine pregnancy. Ultrasonography remains the main method for the diagnosis of extrauterine pregnancy. It usually shows no uterine wall surrounding the fetus, fetal parts that are very close to the abdominal wall, abnormal lie, and no or decreased amniotic fluid between the placenta and the fetus. Magnetic resonance imaging and serum α -fetoprotein have been used to diagnose abdominal pregnancy.^{4,5} These tests were not performed on our patient as the diagnosis was not suspected.

Typical deformities have been observed in the extrauterine abdominal pregnancy babies, including limb defects, facial and cranial asymmetry, joint abnormalities, and central nervous malformation. In this case, it was seen that the baby was protected by the surrounding amniotic fluid and sac, which could explain the absence of deformities in the baby, and the massive bleeding that occurred from the detached part of the placenta was due to the adherence of the placenta to the abdominal viscera which, unlike the uterus, does not contract.

It has been observed that it may be preferable to leave the placenta in place and allow its natural regression unless the placenta can be easily tied off or removed. There was significant bleeding

from some detached portions of the placenta that prompted the removal of these portions to secure hemostasis in this case. Maternal deaths associated with abdominal pregnancy result from hemorrhage after inadvertent dislodgment of the placenta. It is recommended to leave the placenta *in situ* and follow up with USG and human chorionic gonadotropin levels.

In abdominal pregnancy, it is very rare to have a resultant healthy newborn. Early rupture of tubal ectopic pregnancy is the usual antecedent of a secondary abdominal pregnancy, as reported by Shanbhag and Singh,⁶ whereas advanced secondary abdominal pregnancy has been reported by Desai et al.⁷ and also till term by Farhet and Roohi.⁸

In advanced pregnancy, diagnosis of the condition can be difficult. The routine means of diagnosis are a high level of suspicion, and careful clinical and ultrasound examinations through CT scan and MRI can be useful. Bleeding is the single most important life-threatening complication for the mother, while fetal malformation is one of the numerous challenges that can confront the newborn.

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