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Case Report

A rare case of live full-term fetus in primary abdominal pregnancy

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ABSTRACT

This is a case report presenting, gravida 3 para 2 live 1 with primary abdominal pregnancy. It is a potentially life-threatening form of ectopic gestation with an incidence of 1% of all the ectopic pregnancies. In this case, the patient delivered a full-term male baby. The baby cried immediately after birth. The patient was stable post operatively but on 10th POD, developed pancytopenia with pleural effusion. The pancytopenia was methotrexaate induced. She was admitted in ICU and was given oxygenation, folinic acid and higher antibiotics. She was discharged on 20th POD after vitally and hemodynamic stability. In this case, though the patient was managed effectively but abdominal pregnancy is associated with significant maternal morbidity and mortality. Therefore, early diagnosis of the case still remains the most important modality for efficient management of the patient.

Keywords: Ectopic pregnancy, Live baby, Methotrexate, Pancytopenia, Pleural effusion

INTRODUCTION

Abdominal pregnancy is a potentially life-threatening form of ectopic gestation with an incidence of 1% of all the ectopic pregnancies. Rarely, it may reach at advanced gestation and a viable fetal outcome is indeed a rare event. Most of them are terminated earlier due to poor fetal prognosis and higher chances of maternal mortality secondary to haemorrhagic shock following spontaneous placental separation.[1]

About 1-2% of all pregnancies are ectopic pregnancies and more than 95% of them occur within the fallopian tubes.[2]

Abdominal pregnancy refers to a pregnancy that has implanted in the peritoneal cavity, outside the normal endometrial cavity and fallopian tubes.

CASE REPORT

A 23-year-old pregnant women gravida 3, para 2, live 1 at gestational age 37 weeks came to OPD of obs and gynec department. She was un-booked. Routine third trimester, ANC USG was done, which showed full term fetus with Breech presentation with oligohydramnios (AFI <2).

Her menstrual history was normal and as per LMP-14th November, 2020. Her EDD was 21st August, 2021 and gestational age was 36 weeks 5 days.

Her obstretic history depicted P1-FTVD: 4 years back, but the baby died on 15th day of life (Due to pyrexia of unknown origin) P2-FTVD: 3 years back. Live with normal milestones. No history of any abortion. She was not using contraceptives. She had conceived spontaneously in the present pregnancy.

In this pregnancy, she has not taken regular ANC visit. She has come for the first ANC visit at 3rd trimester. Rest of her past and personal history was normal. No surgical history in the past.

She was vitally stable. ON P/A examination-uterus was 12 weeks size, the pregnancy seemed to present on the left side of uterus, fetus parts were easily palpable with breech presentation. FHS was present.

On P/V examination, cervix was undilated, uneffaced (tubular in shape), posteriorly placed.

She underwent a cesarean section under spinal anaesthesia in view of breech presentation with oligohydramnios.

Intra operative findings

Uterus was of prepregnant size approx. 9.5×5.0×2.5 cm with normal bilateral tubes and ovaries. Live fetus with amniotic sac was within the left broad ligament of uterus, a case of primary abdominal pregnancy.

Incision was made on uterovesical fold and extended over the anterior lip of broad ligament. Baby was delivered by Breech presentation. Single loop of cord was seen and released. Cord was clamped and cut and baby was handed over to pediatricians. A 1.8 kg male baby was born and the baby cried immediately after birth. Fetus was present between the broad ligaments of uterus and posterior part of placenta was adherent to the descending colon. No attempt was made to separate the placenta. After 10 min part of placenta separated spontaneously leading to significant bleeding. About 2/3rd of placenta was separated from the bowel by blunt and sharp dissection and hemostatic suture were taken whenever required. On left side uterine vessel was ligated. Hemostasis was achieved. Drain was kept inside the abdominal cavity. Intraoperatively 1-unit PCV was given. Abdomen was closed in layers. Patient was hemodynamically stable and was shifted to OT recovery for observation.

Postoperatively 2 units of PCV and 2 units of FFP was transfused as Hb was found to be 7 gm% with persistent tachycardia. On POD 1, single injection methotrexate was given for the leftover placenta in the abdominal cavity. On POD 2 injection folinic acid was given. The drain was removed on 3rd POD. From 7th POD patient started complaining of persistent cough. On 10th POD stitch removal was done. Stitch line was healthy but there was continuous blood-stained discharge from the stitch line. Patient was diagnosed with pancytopenia (Methotrexate induced) With moderate amount of pleural effusion on X-ray chest.

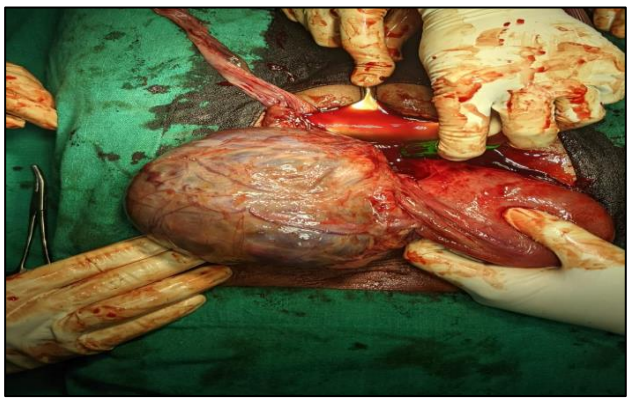

Figure 1: Live fetus.

Patient was shifted to I.C.U where she was treated with higher antibiotics and injection folinic acid for 5 days. Patient was transfused 1 PCV and 2 platelets concentrate. After 15 POD, patient was transferred to obs ward. She was kept under observation for 5 days. Once patient was vitally and hemodynamically stable with, Hb-9.1 gm%, TLC-8700 cells /cumm, platelet-4.5 lakh /cumm was discharged on 20th POD.

DISCUSSION

Abdominal pregnancies can be classified into primary and secondary type based on the primary site of the gestational implantation. The primary type of abdominal pregnancy is a type of ectopic pregnancy in which the blastocyst primary implanted inside the peritoneal cavity while the secondary type of abdominal pregnancy is initially implanted either in the tube, uterus or ovary but later migrates out due to tubal or uterine rupture or tubal abortion, then it will be implanted into the peritoneal cavity.[3,4]

Advanced abdominal pregnancy (AAP) is classically defined as a pregnancy that has progressed beyond 20 weeks of gestation in which the fetus is growing and developing in the mother's abdominal cavity, or the fetus shows signs of having been in the mother's abdominal cavity. It is an extremely rare obstetric complication with high maternal and perinatal mortality. A review of cases from 2008 to 2013 showed that 38 cases of an AAP resulting in a live birth were identified from 16 countries. This case is being reported because no similar case has been reported so far.

This case demonstrated how the diagnosis of abdominal pregnancy is difficult and why a high index of suspicion is more important in diagnosing the condition especially in poorly resourced centers. In this case the diagnosis was missed on initial ultrasound at the hospital.

Though the exact etiology of primary abdominal pregnancy is unknown there are different risk factors identified. These include tubal damage, pelvic inflammatory diseases, multi-parity, *in vitro* fertilization, and others. In the current patient, except multi-parity, there were no identified risk factors.[3]

According to Studdiford's criteria, the diagnosis of primary abdominal pregnancy is based on the following anatomic conditions:1) normal tubes and ovaries, 2) Absence of an uteroplacental fistula and 3) attachment exclusively to a peritoneal surface early enough in gestation to eliminate the likelihood of secondary implantation from primary site.[7] In this case though the bilateral tube and ovary looked normal, the placenta is attached and getting blood supply from the omentum and bowel. For this reason, this patient can be diagnosed as the primary type of abdominal pregnancy.

In a late trimester laparotomy is the main stay of management.[3] The fetus can be delivered easily but the decision about the management of the placenta should be made cautiously since removal of the placenta may cause torrential bleeding and maternal death.[3,8,9]

Removal of placenta should only be tried if attachment is simple and easy to remove.[10,11] In this woman, the placenta was attached to the omentum and bowel which was not easily separable so partial placenta was removed and some part of placenta was leftover in abdomen. If the placenta is attached to major vessels or pelvic side wall it is recommended to leave the placenta in situ and give methotrexate. If the placenta is left in situ the placenta may become necrotic and super infected increasing the risk of abscess formation and sepsis so post-operative follow up is very important.[11,12]

For the newborn, it is very important to rule out congenital malformations. There are reports of fetal malformations as high as 40% associated with abdominal pregnancies. [13] In this case no congenital malformations were detected.

CONCLUSION

Abdominal pregnancy often leads to early spontaneous separation of the placenta from implantation site, causing abdominal bleeding. In rare cases, the pregnancy can develop to late stages like in our case. Ultrasonography remains the main method for the diagnosis of extra uterine pregnancy. It usually shows no uterine wall surrounding the fetus, fetal parts close to the abdominal wall, abnormal lie and/or no amniotic fluid between the placenta and the fetus. However, in our case Sonologist completely missed the diagnosis of abdominal pregnancy. Intrauterine growth restriction is common in advanced abdominal pregnancies. In our case; the newborn was only 1.8 kg with signs of IUGR, at 36 weeks of gestation. The most important issue in managing advanced abdominal pregnancy is the placental management. The massive hemorrhage that often occurs with surgery is related to the lack of constriction of the blood vessels after placental separation. So, attempt should not be made to remove the placenta. In-spite of managing the intraoperative and immediate post operative period well, this patient went into pancytopemia with pleural effusion. So, abdominal pregnancy is associated with significant maternal morbidity. Therefore, early diagnosis of the case still remains the most important modality for efficient management of patient.

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