

Term live secondary abdominal pregnancy: a case report

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ABSTRACT

An abdominal pregnancy is defined as an ectopic pregnancy that implants in the peritoneal cavity. Abdominal pregnancy is a rare form of ectopic pregnancy and is frequently misdiagnosed. Advanced abdominal pregnancy is a rare event, with high fetal and maternal morbidity and mortality. We report a case of abdominal pregnancy leading to a delivery of a healthy baby girl weighing 1.75 kg. A 35 year old woman, gravida 2 para 1 was referred from a private hospital as a case of term pregnancy with transverse lie, placenta praevia and severe oligohydramnios (AFI-3) with complaints of severe abdominal pain for one day. The patient suffered from recurrent abdominal pain with painful fetal movements throughout her pregnancy. Diagnosis was missed inspite of ultrasound examination. Intraoperatively it was diagnosed to be a case of abdominal pregnancy, where we delivered a healthy baby without any difficulty. Deattached placenta was removed in piecemeal. There occurred severe torrential bleeding was managed by peritoneal packing. Both mother & foetus survived due to timely management & quick surgical decision. Patient was followed regularly with serum β HCG level.

Keywords: Ectopic pregnancy, Abdominal pregnancy, Oligohydramnios, Recurrent abdominal pain, Torrential bleeding

INTRODUCTION

Abdominal pregnancy is a rare event, but one that represents a grave risk to the health of the pregnant woman. An abdominal pregnancy is defined as an ectopic pregnancy that implants in the peritoneal cavity. Early abdominal pregnancy is self-limited by hemorrhage from trophoblastic invasion with complete abortion of the gestational sac that leaves a discrete crater. Advanced abdominal pregnancy is a rare event, with high fetal and maternal morbidity and mortality. The incidence of abdominal pregnancy is 1:10,000. The incidence of advanced abdominal pregnancy is approximately 1 in 25000 births. The overall mortality rate associated with abdominal pregnancy is 0.5 to 8.0 %. Delay in diagnosis is mainly due to difficulties in clinical assessment caused by variance in presentations. Progressive lower

abdominal pain is an outstanding symptom. The treatment of secondary abdominal pregnancy is ultimately surgical. The surgical management of the attached portions of the placenta will always represent the major problem.

CASE REPORT

A 35 year old woman, gravida 2 para 1 was referred from a private hospital as a case of term pregnancy with transverse lie, placenta praevia and severe oligohydramnios (AFI-3). On arrival she had complaints of severe abdominal pain for 1 day. There was no history of bleeding or leaking per vagina. She had regular antenatal care in a private hospital. The patient suffered from recurrent abdominal pain in first trimester but her second trimester was uneventful. However, again in third

trimester she had recurrent abdominal pain and painful fetal movements. She was on regular iron, folic acid and calcium tablets. She was immunized with 2 doses of tetanus toxoid. She had three ultrasound examination done, with the last one on the day of referral with a finding of a single live intrauterine gestation with gestational age 33 weeks+6 days with transverse lie, placenta previa and severe oligohydramnios (AFI-3).

On general examination

She was conscious, oriented. She had a pulse rate of 110/min, BP of 110/70 mmHg. Cardiovascular and respiratory systems did not reveal any abnormalities.

Abdominal examination revealed generalized abdominal tenderness. Foetal part felt superficial. There was no definite uterine contour. Symphysis fundal height of 33 weeks, transverse lie with foetal heart rate was 134/min. There was no vaginal bleeding. Internal pelvic assessment revealed cervix parous with internal os closed. Presenting part of the foetus high up. Her investigations were normal. She was planned for emergency cesarean section on account of term pregnancy with transverse lie, placenta previa and severe oligohydramnios.

Intraoperative

On opening the peritoneum, live baby was seen inside the abdominal cavity with an amniotic sac. Baby was delivered by breech extraction. Baby was healthy with foetal weight of 1.75 kg, without any congenital deformities. Uterus was in pelvis with normal fallopian tubes & ovaries. Placenta was seen adherent to bladder, bowel, omentum and upper portion of uterus. Torrential bleeding occurred from the placental surface (Figure 1).

Meanwhile, patient went into severe hypotension. General anaesthesia was given and patient was intubated. Four units of packed cell was transfused intraoperatively. There was significant bleeding from detached portions of placenta, which prompted the removal of detached placenta to facilitate hemostasis. Rest of placenta was left in situ. Haemostasis was secured by hemostatic sutures and intraabdominal packing. Relaparotomy was done after 24 hours to remove the abdominal pack. Abdominal drain given and she was transferred to intensive care unit for monitoring. She was shifted toward the next day with normal vital signs. Ultrasound was done on 4th Post-operative day which show normal uterus with mixed echogenic shadow just above fundus of uterus (Figure 2).

Serum β HCG was 1200 IU/L. She was discharged home with the baby 10 days after surgery. She had review check-up after 8 weeks with U.S.G (Figure 3) & serum β HCG. Uterus was normal, the mixed echogenic shadow reduced & serum β HCG level of 8 IU/L. She was advised to do serum β HCG level every quarterly.

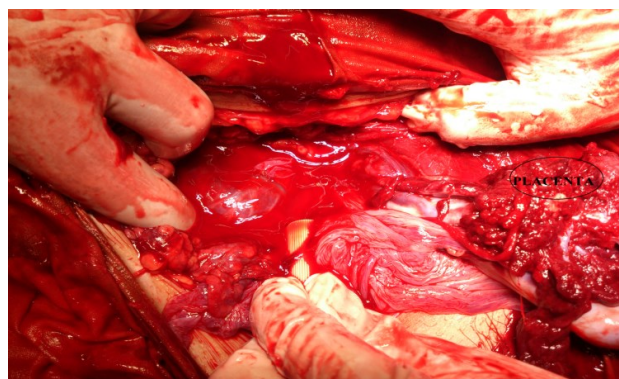


Figure 1: Torrential bleeding while removing the detached portions of placenta.

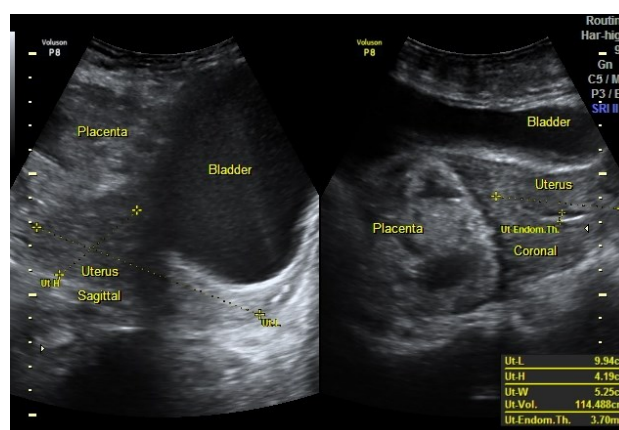


Figure 2: Ultrasound image of the placenta *in situ* on 4th postoperative day.



Figure 3: Ultrasound image of the patient after 8 weeks showed complete resolution of placenta.

DISCUSSION

The incidence of abdominal pregnancy is 1:10000 and advanced abdominal pregnancy had an incidence of about 1 in 25000 births. Abdominal pregnancy is associated with high morbidity and mortality, with the risk for death 7 to 8 greater than from tubal ectopic pregnancy and 50 times greater than from intrauterine pregnancy.¹

Abdominal pregnancies are classified as primary and secondary. Most of them are secondary the result of early tubal abortion or rupture with secondary implantation of the pregnancy into the peritoneal cavity.

Abdominal pregnancy has diagnostic difficulties due to variable clinical presentation. Several clinical presentations are recurrent abdominal discomfort, painful fetal movements, fetal movement high in abdomen, sudden cessation of fetal movements.² Ultrasound is the most effective method for diagnosing an abdominal pregnancy. Even with ideal conditions, however a sonographic diagnosis of abdominal pregnancy is missed in half of cases.³ In a case report by Harris et al.,⁴ the diagnosis of abdominal pregnancy was suspected by ultrasound but it was confirmed by Magnetic Resonance Imaging (MRI). The area of implantation of the placenta and its relationship to the pelvic organs and the vascular supply could be more closely visualized by MRI. Whenever an abdominal pregnancy is identified, MR imaging should be done to provide maximal information concerning placental implantation.⁵ In our patient, initially a diagnosis of abdominal pregnancy was missed by both clinical findings and ultrasonography.

Our patient was taken for emergency cesarean section on account of term pregnancy with transverse lie, placenta previa and severe oligohydramnios and was found to have an abdominal pregnancy. There was torrential bleeding from detached portions of placenta so abdominal pack was given and rest of the placenta was left in situ. During surgery, placenta can be removed if its vascular supply can be identified and ligated, but hemorrhage can occur, requiring abdominal pack that is left in situ and removal after 24 to 48 hours.⁶ If vascular supply cannot be identified, whole placenta is left *in situ*. Placental involution is monitored with serial ultrasound and β -HCG value.⁷ Our patient was followed up weekly till eight weeks. Ultrasound examination following eight weeks showed complete resolution of placenta and negative β -hCG level.

About 21% of babies born after an extrauterine abdominal pregnancy have birth defects, presumably due to compression of the fetus in the absence of the amniotic fluid buffer. Typical deformities include limb defects, facial and cranial asymmetry, joint abnormalities and central nervous malformation.⁸ In our case child did not have any congenital malformation or deformities.

CONCLUSION

Full term undiagnosed abdominal pregnancy with a healthy fetus is extremely rare. Even inspite of repeated sonography early diagnosis was missed in our case.

However we are fortunate to report this rare case where we could save both mother and baby. A high index of suspicion and full-fledged surgical setup with intensive care is required in order to give the best management. Because most diagnoses of advanced abdominal pregnancy are missed pre-operatively even with the use of sonography, the cornerstones of successful management seem to be quick intra-operative recognition, surgical skill, ready access to blood products, meticulous post-operative care and thorough assessment of the newborn.

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