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Case Report

Secondary abdominal pregnancy

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Abdominal pregnancy may account for up to 1 percent of ectopic pregnancies. The incidence of abdominal pregnancy differs in various publications and ranges between 1:10,000 pregnancies to 1:30,000 pregnancies.[1] It was reported for the first time in 1708 as an autopsy finding and numerous cases have been reported worldwide ever since. Abdominal pregnancies refer to those with extra uterine implantations in omentum, vital organs, or large vessels. These pregnancies can go undetected until an advanced gestational age and often result in severe hemorrhage. Rates of maternal mortality have been reported as high as 20%. Advanced abdominal pregnancy carries a risk of hemorrhage, disseminated intravascular coagulation, bowel obstruction, and fistulae. Frequently, these pregnancies are encountered with a viable fetus, which complicates their management. Implantations have been reported in the pelvic cul-de-sac, broad ligament, bowel, and pelvic sidewall. The site of implantation and availability of vascular supply are believed to be factors that may influence the possibility of fetal survival. Abdominal pregnancy at term with a healthy viable fetus is therefore a very extremely rare condition and very few of such cases have been published during the last ten years. We present a case of abdominal pregnancy where the gestational sac was implanted in the broad ligament and resulted in a live baby without malformations which is a rare of rarest event.

Introduction

Abdominal pregnancy may account for up to 1 percent of ectopic pregnancies. The incidence of abdominal pregnancy differs in various publications and ranges between 1:10,000 pregnancies to 1:30,000 pregnancies.[1] It was reported for the first time in 1708 as an autopsy finding and numerous cases have been reported worldwide ever since. Abdominal pregnancies refer to those with extra uterine implantations in omentum, vital organs, or large vessels. These pregnancies can go undetected until an advanced gestational age and often result in severe hemorrhage. Rates of maternal mortality have been reported as high as 20%. Advanced abdominal pregnancy carries a risk of hemorrhage, disseminated intravascular

Case report

25 year old female Primi Gravida patient presented at our centre at 33 weeks 6 days of gestation with complains of pain in abdomen. She was a booked case in civil hospital and was diagnosed as a case of placenta previa. At the time of admission there was no history of bleeding per vaginum and she was perceiving adequate fetal movements. On examination vitals were stable, mild pallor present, per abdomen uterus was 32 weeks size, irritable, non tender. She was admitted for evaluation, close monitoring and surfactant induction. Her hemoglobin was 9.6 gm%, coagulation profile and biochemical parameters within normal limits. Ultrasound showed single live intrauterine fetus, placenta covering internal os with no retro placental clot and amniotic

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fluid index of 10 cm.Patient was planned for elective LSCS at 38 weeks of gestation for placenta previa.

During the hospital stay she complained of off & on dull aching pain in abdomen with constipation however there was no remarkable finding on clinical examination. At 35 weeks 3 days of gestation she developed acute pain in abdomen. She had tachycardia and hypotension, abdomen was tense, tender, and fundal height was more than period of gestation. There was fetal tachycardia. Clinical diagnosis of abruptio placentae was made and Patient was immediately taken up for emergency cesarean section. Intra operatively there was massive hemoperitoneum and large right side adnexal mass covered with omentum. Uterus was almost normal size, separate from the mass Fig. 1. Adnexal mass was opened with blunt dissection underneath which there was live fetus, which was delivered. On further exploration placenta was found to be adherent to the right broad ligament. Effort was made to remove the placenta in piece meal but the adherent part continued to bleed profusely. To attain hemostasis right side fallopian tube and broad ligament with the adherent placenta were clamped, cut and ligated. Amniotic sac which was adherent to the omentum was removed by partial omentectomy Fig. 2. Post operative recovery was uneventful. Healthy mother and newborn (wt 2.6 Kg) were discharged on 10th post operative day.

Discussion

Extra uterine abdominal pregnancy beyond second trimester and with a viable fetus is a extremely rare condition. It is classified into two types. Primary abdominal pregnancy refers to pregnancy where implantation of the fertilized ovum occurs directly in the abdominal cavity. In such cases, the Fallopian tubes and ovaries are intact. There were only 24 cases of primary abdominal pregnancy reported up to 2007. In contrast, secondary abdominal pregnancy accounts for most cases of advanced extra uterine pregnancy. It occurs following an extra uterine tubal pregnancy that ruptures or aborts and gets re-implanted within the abdomen.[2] In our case the intermittent abdominal pain with constipation that our patient experienced during her pregnancy, the free fluid and low lying placenta seen on ultrasound examination, are suggestive of a tubal ectopic pregnancy that aborted and resulted in secondary implantation in the broad ligament. Accordingly, this was most likely a case of secondary abdominal pregnancy. The diagnosis was missed during antenatal care, and the ultrasound examination findings were repeatedly misinterpreted as an intrauterine pregnancy with placenta previa. Diagnosis of this condition is frequently missed, with only about 45% of cases diagnosed during the antenatal period. It is interesting to note that patients with an extra uterine abdominal pregnancy typically have persistent abdominal and/or gastrointestinal symptoms during their pregnancy. Ultrasonography remains the main method for the diagnosis of extra uterine pregnancy.[3] It usually shows no uterine wall surrounding the fetus, fetal parts that are very close to the abdominal wall, abnormal lie and/or no amniotic fluid between the placenta and the fetus. Interestingly, amniotic fluid was detected in all ultrasound examinations in this patient but it was technically difficult to estimate its amount. The impression that the patient had placenta previa was likely due to the fact that the placenta was lying in the broad ligament and fetus in the abdominal cavity with empty uterine cavity. Magnetic resonance imaging and serum a-fetoprotein have been used to diagnose abdominal pregnancy. However, there was no justification to perform these tests in our patient as the diagnosis was not suspected. About 21% of babies born after an extra uterine abdominal pregnancy have birth defects, presumably due to compression of the fetus in the absence of the amniotic fluid buffer.[4] Typical deformities include limb defects, facial and cranial asymmetry, joint abnormalities and central nervous malformation. In this case, the baby was protected by the surrounding amniotic fluid and sac which could explain the absence of deformities in the baby. The massive bleeding that occurred when the placenta was removed was due to the adherence of the placenta to the broad ligament which, unlike the uterus, does not contract. It has been reported that, unless the placenta can be easily tied off or removed, it may be preferable to leave it in place and allow for its natural regression.[5] However, leaving the placenta in situ has been associated with increased postoperative morbidity and

Fig. 1 – Normal size uterus.

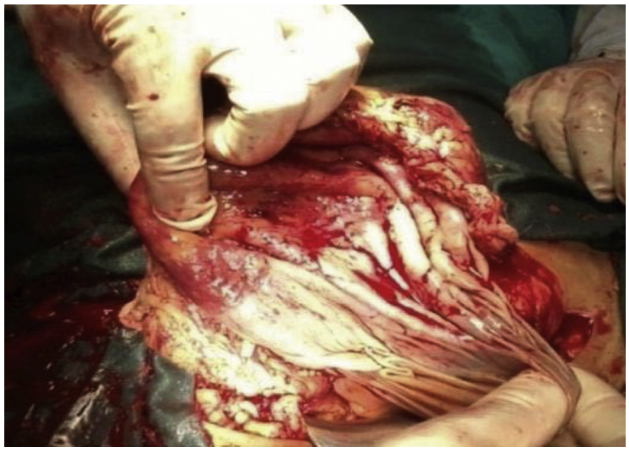

Fig. 2 – Amniotic sac attached to omentum.

mortality and is thus not routinely advisable. Since the diagnosis is frequently missed preoperatively and adverse fetal and maternal outcome does not necessarily occur in association with the continuation of pregnancy, one could argue that the termination of an advanced extra uterine pregnancy upon antenatal diagnosis might not be warranted. However, these cases should be followed-up closely when the diagnosis is made to prevent adverse outcomes.[6] There are only very few case reports of advanced extra uterine pregnancy that ended in a viable health fetus with no malformations and a healthy mother and hence this was a rare of the rarest case of secondary abdominal pregnancy.

Conflicts of interest

The authors have none to declare.

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