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TERM ASYMPTOMATIC ABDOMINAL PREGNANCY WITH GOOD MATERNAL AND PERINATAL OUTCOME: A CASE REPORT

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- **ABSTRACT**

Abdominal pregnancy is a potentially life-threatening form of ectopic gestation with a worldwide incidence of 1:3300 to 1:10200 births. Its incidence appears to be increasing in both the developed and developing worlds.
This paper reports on a 28 year old asymptomatic primigravida with a 38 weeks abdominal pregnancy managed successfully with good maternal and perinatal outcome. The literature is reviewed and challenging diagnostic and management problems are discussed.

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Key Words: • Laparotomy • cesarian section • Pfannenstiel incision • Mersilene tape • pregnancy, ectopic

Introduction

About2% of all pregnancies are ectopic, accounting for 10% of all pregnancy-related deaths.[1] More than 95% of ectopic gestations occur within the fallopian tubes.[2]

Abdominal pregnancy, where implantation occurs within the peritoneal cavity, is much more uncommon. It has a worldwide incidence of1:3300 to 1:10200 and occur for 1-4% of all actopic pregnancies.[3-7] Even more uncommonly does it reach an advanced stage of gestation, and a viable abdominal pregnancy with a successful outcome is a rare event indeed.[8-10]

Diagnosis of abdominal pregnancy is difficult and often missed.[1,4] Signs and symptoms such as abdominal pain, gastrointes- tinal symptoms, painful fetal movements, abnormal presentations, uneffaced and displaced cervix, vaginal bleeding and palpation of a pelvic mass distinct from the uterus, are considered suggestive of abdominal pregnancy.[3,4]

Abdominal pregnancy is a potentially life-threatening condition with high maternal-fetal mortality and morbidity. Maternal and perinatal mortality rates of 0.5-18% and 40-95 respectively, have been reported in the literature.[1]

This paper reports on a 28 year old asymptomatic primigravida with a 38 weeks abdominal pregnancy, diagnosed at laparotomy, and managed successfully with good maternal and perinatal outcome.

Case Report

The 28 year old primigravida from a rural area with no perinatal care was admitted by the resident staff to Zeinabieh Hospital in early labor. Her only prenatal care consisted of four sonograms and hospitalization for pyelonephritis 3 weeks prior to admission. The first 3 sonograms had shown a single viable fetus with gestational ages of 16, 30 and 34 weeks, adequate amniotic fluid and a placenta that

was described as fundal, placenta previa and anterior, respectively. During the hospitalization for pyelonephritis, she had been adequately treated with intravenous followed by oral antibiotics. A fourth sonogram at that time had shown single live fetus at 35 weeks, anterior placenta and decreased amniotic fluid. Because of the decreased level of amniotic fluid, continued hospitalization had been recommended to the patient, but she had refused.

On present admission gestational age was determined to be 37 weeks by dates and 38 weeks by the first trimester sonogram. The patient was described as having regular contractions of good quality with a fetal heart rate of 140 beats/minute. Pelvic examination revealed the cervix to be 20%, effaced and 1 cm dilated. Leopold maneuvers suggested breach presentation, which was confirmed by flat abdominal X-ray. The resident staff also felt that the abdomen was unusually tense and rigid. With a working diagnosis of primigravida, breech and possible early occult placenta abruption, the attending physician was called for an emergency cesarrian section.

At laparotomy, upon entering the abdomen via a Pfannenstiel s incision a term-size live fetus was found inside an intact amniotic sac within the abdominal cavity. No hemoperitoneum was present. After amniotomy by slow decompression, a normal live female infant was delivered from breech presentation. It weighted 3000 g and had. Apgar scores of 9 and 10 in 1 and 5 minute. The uterus was 12 weeks gestational size and pushed to the right hemipelvis. Tubes and ovaries were normal in size and shape. The placenta was attached to a broad area encompassing the left abdominal and pelvic sidewalls, posterior cul-de-sac and the posterior surface of the bladder. After extraction of the fetus, a large 8 cm L-shaped laceration on the fetal surface of the placenta was noted with profuse bleeding, which continued throughout attempts performed at hemostasis. Compression, intraabdominal packing and ice bags were used to no avail. Ultimately, the placental laceration was sutured with Mersilene tape and the bleeding was controlled. There was no placental separation and the placenta was left in-situ without any attempts at delivery. During the procedure there was an estimated blood loss of 5000 cc, and the patient received 6 units of whole blood, 10 packs of platelet and 4 units of fresh frozen plasma.The newborn was thoroughly screened by the neonatology staff and found to be healthy with no congenital anomalies or deformities.The patient's postoperative course was uneventful except for mild abdominal distention, which was relieved with intermittent nasogastric suction. On the second postoperative day, an abdomino-pelvic sonogram revealed normal liver, gall bladder, spleen, and mild caliectasis of the kidneys. The uterus was normal with an empty cavity. Tubes and ovaries were normal. A large heterogeneous mass, measuring 27 x 22 cm, was present outside the uterus, occupying the left pelvis and lower abdomen, and extending to the left upper quadrant. No ascites or blood was detected in the peritoneal cavity. The patient resumed normal gastrointestinal function, starting diet on the third day and was discharged two weeks postoperatively. Beta-HCG was obtained weekly. After discharge, the patient was followed in the outpatient department weekly for two weeks, then after two weeks and then monthly for 4 months. Each time a complete examination and beta-HCG determination were done. She remained completely asymptomatic with normal examinations except for a palpable, non-tender, fixed mass in the left lower abdomen and pelvis. Her beta-HCG levels dropped precipitously, became undetectable after 4 weeks, and remained so for the next 4 months (Fig. 1).

The last sonogram, 6 months postoperatively, revealed a heterogeneous mass, measuring 22 x 14 cm, in the left lower abdomen and hemipelvis. She was then lost to follow-up.

Discussion

The incidence of abdominal pregnancy appears to be increasing in both developed and developing countries.[11] In the former, increasing use of assisted reproductive technology with embryo transfer has been associated with increasing numbers of heterotopic pregnancies.[12-15] In developing countries,

particularly in rural areas, a high incidence of abdominal pregnancies is reported, presumably due to restriction of human resources and diagnostic facilities, and poor utilization of medical care by pregnant women.[16-18]

Under these circumstances, some undiagnosed tubal pregnancies may abort into the peritoneal cavity, implant and continue into advanced abdominal pregnancies. Nonetheless, viable advanced abdominal pregnancies are still rare, and only a few sporadic cases have been reported in the past 10-15 years.[8-10] The present case appears to be the longest surviving one with good outcome in recent literature. It behooves every clinician to have a high index of suspicion for this condition, and be familiar with its challenging diagnostic and management features. The case presented here came from a rural area and had no prenatal careThe fact that , in spite of4 sonograms , the diagnosis was missed preoperatively, is disturbing but not unusual. Not only was she asymptomatic, but the signs and symptoms suggestive of abdominal pregnancy were non-specific. Even under the best circumstances, and using sonography, the diagnosis is often missed.[6,19-21]

However, CT scan and magnetic resonance imaging have been used successfully to complement sonography in making an accurate preoperative diagnosis of abdominal pregnancy.[1,22-25] A lateral x-ray of the abdomen showing fetal small parts overlying the maternal spine, may also be helpful.[3] Elevated maternal serum alpha-fetoprotein has been associated with abdominal pregnancies, particularly those with more extensive visceral implantation, and should raise the suspicion for this diagnosis.[20,26]

Once the diagnosis is made, optimal management requires careful evaluation and planning. There is a general consensus that for pre-viable abdominal pregnancies, i.e. prior to 23-24 weeks of gestation, immediate operative intervention is indicated. For viable pregnancies presenting after 24 weeks of gestation, there has been some debate in the literature regarding the appropriateness of a more conservative management.[4] This, however, should not be undertaken unless the patient can be kept under strict observation, and preferably, hospitalized.

Management of advanced abdominal pregnancy poses a great challenge to even the best of clinicians. It is often associated with severe blood loss, for which one should be prepared.[6,27]

Massive hemorrhage occurs more frequently when attempts are made to remove the placenta.[6,28] Unless the entire blood supply of the placenta can be ligated, it is best to leave the placenta in-situ, as was done in the present case after the bleeding was controlled.[6] The patient should then be followed with serial beta-HCG levels and sonograms (preferably color doppler) for placental involution.[24,28] This was done successfully in the present case.

The use of methotrexate to hasten placental involution and resorption, is currently controversial since it often leads to accelerated placental destruction with accumulation of necrotic tissue, and ultimately to infection and abscess formation.[1] Hence, it was not used in this case.

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