

ABDOMINAL PREGNANCY A CASE REPORT

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ABSTRACT

Abdominal pregnancy in the third trimester is rare; the subsequent delivery of a viable full term fetus is exceptional. In a world with advances in imaging technology the early detection of an abdominal pregnancy should be a feasible objective. A case report of advanced abdominal pregnancy ending up in an alive male baby is presented.

INTRODUCTION

Abdominal pregnancy is a variety of ectopic pregnancy defined as an intraperitoneal implantation exclusive of tubal, ovarian or intraligamentous implantation¹. The reported incidence of abdominal pregnancies is from 1 in 3500 to 1 in 15,000 livebirths² and 9.2 abdominal pregnancies per 1000 ectopic gestation³.

Optimum care is required in early diagnosis of abdominal pregnancy and prompt surgical intervention to avert the potential complications. Abdominal pregnancy in the third trimester is a rare event with a high maternal and fetal morbidity and mortality⁴. Since the risk of dying from abdominal pregnancy is 7.7 times greater than tubal and 90 times greater than intrauterine pregnancy⁵, every obstetrician needs to be aware of its clinical features in order to prevent their related complications.

The earliest description of abdominal pregnancy was recorded nearly 1000 years ago. When the discharge of fetal parts through the abdominal wall in the umbilical region was observed. Gallabin in 1896 was the first to report primary peritoneal pregnancy in his report, the nidation site and pelvic organs were subjected to careful examination following autopsy⁶. In the year 1920 two cases of advanced abdominal pregnancy were published and reference of 223 cases was given. In another case report by Vasantha Subbiah from India it was mentioned that only 109 babies born in such a way globally and just one in India⁷. The reported case by him was the second in

India⁷. The objective of our case report is to call the attention of practicing obstetricians, surgeons to the possibility of an abdominal pregnancy as a cause of a failure to ripen the cervix and careful reevaluation and the use of ultrasound scan improves diagnostic acumen.

CASE REPORT

A 33 years old, woman married for seventeen years Gravida 5 para 3, miscarriage one presented in the Gynae antenatal clinic with a history of 10 months amenorrhoea and failed induction of labour at some private clinic. Her previous pregnancies were unremarkable, delivering normal babies through normal vaginal route. She had one miscarriage one year back followed by evacuation & curettage. In this present pregnancy she had only one antenatal checkup by some local private doctor. She was told that everything is normal. She had vague abdominal pain on and off during this pregnancy which she considered unusual as compared to previous pregnancies. There is no history of morning sickness, vaginal discharge or any untoward incident during this pregnancy. She visited maternity clinic at 10 months of gestation for only complaint of post dated pregnancy. She was induced with three tablets of prostin at 6 hours interval at some private maternity clinic but there was no onset of labor pains. She was referred to our hospital for postdated pregnancy and failed induction.

On arrival she was haemodynamically stable, well cooperated middle aged woman. Her

pulse rate was 82 beats per minute, normal temperature, pallor not present and blood pressure of 120/70mmhg. On abdominal examination symphyseofundal height was 38cm with positive fetal heart rate. She was slight tender on deep palpation. Pelvic examination showed closed internal os, with uneffaced cervix and high presenting part. Her haemoglobin was 11gm/dl.

Ultrasound along with routine investigations was ordered. Scan findings showed single intrauterine alive fetus 38 weeks, cephalic presentation, with adequate liquor volume. By early scan her period of gestation was 39 weeks. Patient was advised to wait for spontaneous onset of labour or to come after one week if labour does not start. She came with pain abdomen after 3 days. She was assessed, there were no contractions. On vaginal examination os was still closed. A repeat ultrasound was ordered. The report came out to be abdominal pregnancy with an alive fetus showing collapsed uterine cavity and evidence of fetus in the abdomen. Emergency laparotomy was decided. Four units of blood were arranged. The surgeons were asked to remain alert in case the need arises. She was shifted to operation theatre and laparotomy was performed. At surgery, a large abdominal mass enveloped by a thin membrane richly covered with dilated vessels was encountered. After incision of the membrane fortunately an alive 2.4kg male baby with apgar score of 8/10 -10/10 was delivered from abdominal cavity. Placenta was adherent to omentum and posteriorly to uterus. It was removed and bleeding was tried to be secured meticulously. The surgeons were called to have a second opinion. The abdomen was closed and patient had a satisfactory postoperative recovery. Methotrexate was not required in the postoperative period. She was discharged on the fifth day. Serum B hCG became negative within one month.

DISCUSSION

Abdominal pregnancy is a rarity that only a few gynaecologists will encounter during their professional career⁷.

Abdominal pregnancy is a variety of ectopic pregnancy and usually secondary to rupture of a tubal pregnancy into the peritoneal cavity but also result from implantation of a fertilized ovum directly on the peritoneal surface⁴. The incidence of ectopic pregnancy is steadily increasing in the world. The predisposing factors may be infertility, previous pelvic infection, endometriosis, congenital anomalies or previous ectopic pregnancy⁵. The pathophysiology includes altered fallopian tube secondary to some underlying cause.

The viable abdominal pregnancies which progress beyond the first trimester are typically missed on routine transabdominal scanning⁷. With the increasing accuracy of first trimester transvaginal scanning it is likely the prevalence will decrease in future⁸. The reported high rates of maternal (6-14%) and perinatal fetal (90%) mortality rates are related to delayed diagnosis and treatment⁹. The undiagnosed abdominal pregnancy which progress to term may be asymptomatic. Indirect clues for this definition for this diagnosis are :a) abnormal fetal lie, oligohydramnios or intraperitoneal maternal fluid, the inability to stimulate uterine contractions with inducing agents or impossibility to delineate uterus¹⁰.

A case was reported in Nigeria hospital as Gravida 4 para 3+0 presented at 32 weeks gestation with loss of fetal movements. A process of induction of labour was commenced to ripen the cervix with intracervical Foley's catheter and misoprostol tablets but uterus was not stimulated. This prompted further review of the patient. A repeat ultrasound confirmed the diagnosis of abdominal pregnancy¹⁰. This case was much similar to our patient with the difference that our patient presented as post dated pregnancy with alive issue. In women with clinical suspicion of abdominal pregnancy a transvaginal scan should be performed to assess uterus and continuity between cervical canal, uterine cavity and gestational sac.

Sonography may suggest the presence of an abdominal pregnancy when abnormal relations among fetus, uterus, placenta and amniotic fluid are noted. MRI may provide useful information regarding the fetus, placenta, amniotic fluid and uterus with no known biohazards but the precise role of MRI imaging in the evaluation of obstetric patients has yet to be established¹¹. In some cases MRI can be useful to demonstrate the relationship between the fetus, the cervix and myometrium⁸.

Abdominal pregnancy is serious and potentially life-threatening condition. A case of advanced abdominal pregnancy was reported in King Edward Memorial hospital¹⁰. The pregnancy was the result of in vitro fertilization. The diagnosis was not suspected until 35 weeks of gestation. The placenta was left within the peritoneal cavity but removal was necessitated for maternal symptomatology 4 months post delivery.

Beddock et al reported a case of abdominal pregnancy diagnosed by MRI at 17 weeks with prospective follow up and planned delivery at 37 weeks⁶. The authors have proposed that if there is absence of fetal growth malformation, good maternal condition, placental site remote from the upper abdomen, conservative

management in a hospital setting may be recommended. Materno-Fetal follow up is based on physical examination repeated ultrasound investigations with Doppler imaging and daily fetal heart rate monitoring. This show despite the usage of prenatal ultrasound, extra uterine pregnancies may not be detected in a timely manner.

There are still controversies regarding best treatments of abdominal pregnancy. Bertland et al reported a case of 29 years old woman presented at 17 weeks of pregnancy; an ultrasound demonstrated active abdominal pregnancy. MRI was used for placental localization¹². Termination of pregnancy was decided .A pelvic angiogram was performed to localize placental vascularization. Both uterine arteries were embolized followed by selective embolization of the ovarian vessels. Laparotomy was performed with removal of fetus but the placenta was left in place. However, methotrexate was not needed. This case report has thrown light on the importance of imaging and the critical role of radio-interventional techniques in minimizing surgical and postsurgical intervention in the management of abdominal pregnancy¹². A rare case of advanced abdominal pregnancy was also reported by Roberts et al⁹. The interesting thing in this case report was that the pregnancy was the result of in vitro fertilization.

A case was reported by Ludwig et al in which an abdominal pregnancy was misdiagnosed as an ovarian tumor and diagnosed on the first postpartum day of the intrauterine fetus which was delivered spontaneously¹³.

Our patient presented as postdated pregnancy. A similar case of primary abdominal pregnancy was reported at the maternity clinic of Madasgar. The patient presented at 40weeks +2days of gestation and with sudden disappearance of fetal movements. Fetal death was confirmed by ultrasonographic examination and subsequent plain radiographic imaging confirmed diagnosis of primitive abdominal pregnancy. The role of ultrasonography in ongoing pregnancy is emphasized in this report¹⁴.

Regardless of the gestational age removal of placenta can result in haemorrhage. Angiographic arterial embolization may be considered as an option for such cases. The placental bedside can be ligated and the pelvic organs upon which implantation occurred removed¹⁵. Some have advocated the use of methotrexate with varying degrees of success. Risks associated with leaving the placenta in situ include bowel obstruction, fistula formation and sepsis as the tissue degenerates.

CONCLUSION

A high index of suspicion is needed to make a first time diagnosis of abdominal

pregnancy. With timely diagnosis and appropriate management; the prognosis in most cases is favourable.

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