

A Secondary Abdominal Pregnancy - Threat to Maternal Life

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Abstract

In abdominal secondary implantation and gestational product occurs within peritoneal cavity where primary site might be the fallopian tube, less commonly ovary and rudimentary horn. This type of rare pregnancies have higher mortality rate of fetus and mother than tubal ectopic pregnancies due to delay in diagnosis, as the cases present with varieties of manifestation. This leads to irregular antenatal check up, difficulties in clinical assessment and imposes inevitable threat to maternal life due to concealed haemorrhage from the detached crater of the gestational sac. The present report is based on such a case of abdominal pregnancy. The report describes the detail clinical attributes as well as treatment modalities.

Key word: Haemorrhage, abdominal pregnancy, ectopic pregnancy

Introduction

Typically an abdominal pregnancy is a secondary implantation following rupture or derooting from primary site either in fallopian tube or other sites. It is a rare event that leads to a grave risk to the health of pregnant women. The incidence of abdominal pregnancy and advances abdominal pregnancy is 1 in 10,000 and 1 in 25,000 live births respectively¹. The maternal and perinatal mortality ranges between 0.5-8% and 40-95% respectively². Mullarian duct abnormality in women were found around 0.4%, bicornuate uterus in 0.1- 0.4%³. Rarely, pregnancy may be implanted in one of the horn of bicornuate uterus, which is a form of developmental anomaly of the organ. This type of pregnancy should not be confused with cornual pregnancy where gestational product is implanted at interstitial part of fallopian tube.

Case presentation

Mrs. Chaina Khatun, 29 years old multigravid lady presented to the Obs. Dept. of Shaheed Suhrawardy Medical College & Hospital (ShSMCH), Dhaka at her 22 weeks of gestation with pain in lower abdomen. It was not a planned pregnancy & she had no Antenatal check up. Before conception she had monthly menstrual flow with average loss. Her LMP was on 14th April, 2011. During early pregnancy, around 2 months she developed pain in lower abdomen which was controlled by drugs, prescribed by local doctor. Since then she was feeling abdominal pain off and on. Around 18 wks of pregnancy, she developed lower abdominal pain, which was dull in nature, moderate

in intensity and without any radiation. Her pain became exaggerated during foetal movement. With these complains she went to a local doctor & was advised for USG. That showed she had a foetus within abdominal cavity, separated from uterus, without any fluid sac around the foetus. So, inference was, she had abdominal pregnancy. She got admitted in District level hospital from where she was referred to tertiary level hospital. In ShSMCH after admission thorough history was taken. She was examined by a senior obstetrician. On G/E, she was moderately anaemic, normotensive & pulse rate 90/min, fetal head was easily palpable below skin and a separate mass was found about 18 wks size on left lower abdomen. Abdomen was soft but tender. FHR found with difficulty & was about 150/min with regular intervals. Reconfirmation of the diagnosis was done by another USG from the hospital. Decision for laparotomy was taken with 2 units of blood in hand. Abdomen was opened with lower right paramedian incision. After opening the peritoneal cavity about 200 ml of old blood both in liquid & clotted form was found. The foetus was within abdominal cavity wrapped within omentum, lateral end of which was adherent with placenta & ruptured horn of uterus. Per-operative findings revealed initial implantation was in left horn of uterus, that got ruptured and with time due to increase in placental size the ruptured horn was inverted. Left ovarian ligament & fallopian tube was incorporated within inverted horn adherent with placenta. At the outset foetus was unwrapped from the omentum and the baby was delivered cutting umbilical cord. Baby was handed over to

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Paediatrician. The baby was alive, sex male, weighing 1.2 kg & A/S- 8/10. Baby was referred to Neonatal Unit of the Hospital immediately. Then the inverted ruptured horn adherent with placenta was partially excised from posterior aspect to find out the left ovarian ligament. After securing the left ovary, ruptured horn with placenta in situ was excised. Reconstruction of left cornu of uterus was done. Right ovary & right fallopian tube was found healthy. Haemostasis was secured adequately. Peritoneal cavity was explored, blood & clots were removed and abdominal cavity was washed with normal saline. Right sided tubal ligation was done. A drain tube was kept in peritoneal cavity and abdomen was closed layer by layer. Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

Discussion

Diagnosis of abdominal pregnancy required a high index of suspicion. Frequently the diagnosis is missed⁴. A literature review showed that about eight live advanced abdominal pregnancy required have been reported so far, but only two cases have been reported which were live & proceeded to term. History & physical examination are often inconclusive. The pt. presented only with 22wks of pregnancy with pain in abdomen with alive foetus. She was moderately anaemic, normotensive. On abdominal examination, foetal head & other parts are easily palpable per abdominally & uterus was palpated separately in left iliac fossa, FHS was heard. The following features should alert the sonographer like abnormal relationship among foetus & placenta, uterus can be separately identified & cavity was empty. There was moderate collection in pouch of Douglas which was probably due to rupture of rudimentary horn. In spite of considerable improvement in technical abilities, absolute diagnosis by USG is missed in half of cases⁵. One case report published by Amrita et al⁶ has mentioned that a 22-year-old primigravida with an abdominal pregnancy from a ruptured rudimentary horn. She was diagnosed as a case of term pregnancy with placenta previa with a transverse foetal lie and cervical fibroid and was prepared for an elective caesarean section. Intra-operatively, a live term female baby was extracted from the peritoneal cavity and it turned out to be an abdominal pregnancy from a ruptured rudimentary horn of a unicornuate uterus, which is a very rare condition. Mother and baby were in good condition. Desai et al⁵ was reported a case of an initial diagnosis of foetal death with placenta previa detected by USG. After repeated failed induction of labour, a careful repeated USG showed a normal sized empty uterus with macerated foetus in abdominal cavity. Sandberg & Pelligra⁷ published tree cases and mentioned that the diagnosis of abdominal pregnancy was only made preoperatively. In a case report by Herris et al⁸ the diagnosis of abdominal pregnancy was suspected by USG but it was confirmed by MRI. Elevated alpha fetoprotein levels are another clue of presence of an

abdominal pregnancy⁹. MRI has also been used with success to diagnosis abdominal pregnancy¹⁰. However, it can be fatal as it can bleed intraperitoneally resulting in a medical emergency & hemorrhagic shock. Other causes of maternal death in patient with an abdominal pregnancy include toxemia, anaemia, pulmonary embolus, coagulopathy & infection¹¹. But in our case, patient fortunately continued the pregnancy until 22wks without significant haemorrhage. It is general recommendation to perform a laparotomy when the diagnosis of abdominal pregnancy is made¹². Maternal deaths associated with abdominal pregnancy result from haemorrhage after inadvertent dislodgement of placenta. In our patient placenta was attached to ruptured rudimentary horn. It was possible to remove whole of placenta along with rudimentary horn to which it was attached without significant haemorrhage. Removal of entire placenta has been recommended but if significant haemorrhage occurs, it is safer to leave all or part of placenta & allow it to absorb slowly. If haemorrhage is intractable, ligation of feeding vessels may be attempted. Placental vessels have also been blocked by angiographic embolization¹³.

Conclusion

Persistent & recurrent abdominal pain with painful fetal movement should alert the obstetrician to the possibility of abdominal pregnancy. A careful abdominal examination of uterine contour in every case especially when a mass felt separated from foetal parts should raise the diagnostic tool. Lack of proper correlation between uterus & foetus, absence of amniotic fluid are the important findings for abdominal pregnancy. It is generally recommended to perform laparotomy when diagnosis is made. Early management is mandatory to save maternal life for abdominal pregnancy.

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