ABDOMINAL PREGNANCY: A CASE REVIEW

Gilcha H.¹, Kinfemichael H.², Kassa N.², Tadesse K. ¹Department of Obstetrics and Gynecology, Myungsung Christian Medical Center, Addis Ababa, Ethiopia ²Myungsung Medical College, Addis Ababa, Ethiopia

ABSTRACT

Abdominal pregnancy is a rare type of ectopic pregnancy which occurs in 1 in 10,000 ectopic pregnancies. It has a higher risk of maternal mortality and morbidity. We presented a case of a primigravida mother who presented with a complaint of abdominal pain. Ultrasound result showed abdominal pregnancy and she was operated and macerated fetus and placenta was removed. The pain was resolved and patient was discharged with improvement.

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INTRODUCTION

Abdominal pregnancy is defined as pregnancy in the peritoneum cavity outside the uterus and fallopian tube. The pregnancy can implant in the peritoneal cavity or broad ligament. It is a rare type of ectopic pregnancy with an incidence of 1 in 10,000¹ The pregnancy can occur primarily from a fertilization that takes place in the abdomen or secondary to an aborted tubal pregnancy or after in-vitro fertilization. The maternal morbidity and mortality is increased in these pregnancies ^{1,2}. Few abdominal pregnancies continue to the third trimester and to birth. In most of the cases fetal demise occurs³. This case reports an abdominal pregnancy which probably continues to the mid second trimester but failed.

CASE REPORT

A 25-years old, South Sudanese primigravida who was referred from a private hospital as a case of missed abortion presented at the hospital with amenorrhea of eight months, intermittent abdominal pain of five months, and abdominal distention of six months. The pain was aggravated with movement and alleviates with rest. She started to feel decreasing fetal movement following the abdominal pain and the fetal movement ceased a



Figure 1: Abdominal ultrasound of the patient

pregnancy. (Figure 1) Laparotomy was done and thick-walled sac containing macerated fetus and placenta was removed (Figure 2). The amniotic membrane was attached to the anterior and lateral wall of the abdominal cavity. There was an estimated blood loss of 750 ml during the operation. After the surgery, the pain was resolved and the patient was discharged improved.

month before her presentation to the hospital.

In South Sudan, she was admitted and given

medications during the last three months. A month

ago, she was told that the fetus was not alive and she

was given oral medication for three days to expel

the dead fetus which was not successful. Then, she

had an operation with the intent of removing the

dead fetus, but when the abdomen was opened, it

was found that there was no fetus in the uterus and

abdomen was closed and she was discharged after

few days. The abdominal pain was not resolved so

she came to Myungsung Christian Medical Center.

On physical examination, she had a slightly pale

conjunctiva and on abdominal examination, there

was a vertical midline scar below the umbilicus about 8 cm and there was a 26-weeks size mass. There was

no fetal heartbeat. On vaginal examination, the

cervix was closed. Ultrasound showed abdominal



Figure 2: The removed macerated fetus and the placenta

DISCUSSION

Abdominal pregnancy is a rare type of ectopic pregnancy, one in 10,000 births in USA¹and one in 654 births in Nigeria⁴, which is formed through three mechanisms. Primary abdominal pregnancy is when the egg and the sperm cell meet outside in the

abdominal cavity. Secondary abdominal pregnancy is formed after an abortion of fertilized egg from the fallopian tube to the abdominal cavity. Lastly, abdominal pregnancy can be formed by artificial reproductive method after salpingectomies^{1,2}. Although it is difficult to differentiate the first two, secondary abdominal pregnancy is common⁵. Abdominal pregnancy has a high risk of mortality, with 7-8 x greater than tubal ectopic pregnancy and 50x greater than from intrauterine pregnancy¹.

Abdominal pregnancy has variable presentations so is difficult to diagnose it. Some of the clinical presentations of the patients are abdominal pain, vaginal bleeding, nausea, vomiting, painful fetal movements, easily palpable fetal parts, malpresentations and usually transverse lie, and very rarely can have signs of acute abdomen and shock due to severe if there is intra-abdominal hemorrhage, secondary to separation of the placenta, and as a case of failed induction. They can also be asymptomatic⁶⁸. Our patient came with abdominal pain which is one but she didn't have the other clinical features of abdominal pregnancy.

Abdominal pregnancy can be diagnosed by an ultrasonography with typical findings of intraabdominal and extrauterine fetus and placenta. But it can be missed if the pregnancy is close to the intestines or in later stages of the pregnancy^{9,10}. MRI and CT scan are the alternatives to diagnose the abdominal pregnancy. The site of the placenta can be accurately localized on MRI than on ultrasound³. Localizing will help us to plan our management and to decide whether to continue the pregnancy or not⁹.

If the pregnancy is detected early, terminating the pregnancy is safe. We can use different methods to terminate the pregnancy depending on the physical condition of the pregnant and the number of weeks. Laparoscopic or open surgery, arterial embolization, and intracapsular injection of potassium chloride in the abdominal pregnancy sac are the treatment options to terminate the pregnancy⁹. The most feared complication of

surgical treatment is the risk of massive hemorrhage due to the placental attachment to the extrauterine structures including large vessels. Poole et al. mentioned that the mean blood loss is 1450 ml with a range of 50 - 7500 ml, 25% of the women need blood transfusion¹¹. According to one review the most common site of placental attachment was to the uterus and adnexa (47%) followed by the bowel (30%) and the anterior and posterior pouches (8%). The liver (4%), the omentum (4%) and the abdominal wall (4%) were less frequent sites of placental attachment³. In our case, the placenta was attached to the anterior and lateral abdominal wall which is one of the less frequent sites of placental attachment in abdominal pregnancy. Generally, leaving the placenta in the abdomen with follow ups with serum hCG is recommended but removal of the placenta has a better prognosis. The decision to remove the placenta depends on particular case and the risk of hemorrhage⁴.

There are some reported cases of advanced abdominal pregnancy (AAP) and delivery of term live birth babies after AAP. Due to compression of the fetus secondary to absence of the amniotic fluid buffer, birth defects common (21%). The common birth defect is congenital foot malformations followed by joint contractures, facial asymmetry, mild spasticity and intrauterine growth restriction^{3,12}.

CONCLUSION

Abdominal pregnancy is a rare type of ectopic pregnancy. A high index of suspicion should be made if there are indicative clinical features although the presentations are variable. Ultrasonography with an experienced physician can help to diagnose it early and to act accordingly.

Corresponding Author: Haile Gelcha, MD Department of Obstetrics and Gynecology, Myungsung Christian Medical Center, Addis Ababa, Ethiopia Email: gelchahaile@gmail.com

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