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CASE REPORT

G2P1A0L1 27-28 Weeks of Pregnancy + Dead Fetus by Abdominal Pregnancy

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Abstract

Abdominal pregnancy is a rare form of pregnancy but presents a very high risk of both morbidity and mortality for the fetus and mother. This situation is one of the most serious forms of ectopic pregnancy. The incidence of abdominal pregnancy varies, Rahman et al, get an incidence of 1 in 130,200 births. In the United States between 1970-1983 there were 10.9 abdominal pregnancies / 100,000 live births and 9.2 abdominal pregnancies / 1000 ectopic pregnancies. In laparotomy, placental management is the most difficult challenge, because it must be well prepared and planned. In this case report a 36year-old woman with a diagnosis of gravid G2P1A0H1 27-28 weeks + Abdominal Pregnancy + Dead Fetus + Mild Anemia. Laparotomy is performed to deliver the baby, Durante surgery is carried out exploration of the placental attachment. Obtained the placenta embedded in the douglas cavum by attaching to the Ascendent Colon, Rectum, descending colon, intestine and peritoneum. It appears that some of the placenta has detached from its implantation, accompanied by a pile of stout cells. Removal of the placenta was carried out throughout the attachment site. The rest of the placenta is cleaned one by one by clamping with the clam punster slowly.

Keywords: Abdominal Pregnancy, Dead Fetus, Laparotomy

INTRODUCTION

Abdominal pregnancy is a form of advanced ectopic pregnancy, where the result of conception grows outside the uterine cavity. Abdominal pregnancy can be divided into two, namely primary and secondary abdominal pregnancy. Primary abdominal pregnancy is called if the implantation first occurs in the peritoneum, while a secondary abdominal pregnancy is when the first implantation in the tube then undergoes an abortion then reimplantation to the surface of the peritoneum.^{1,2} The incidence of abdominal pregnancy varies, Rahman et al, obtained an incidence of 1 in 130,200 births. In the United States between 1970-1983 there were 10.9 abdominal pregnancies / 100,000 live births and 9.2 abdominal pregnancies / 1000 ectopic pregnancies. This is very dependent on many factors, including geographical (due to the prevalence of PID), socioeconomic status, level of health care, and the quality and quantity of antenatal visits. Risk factors for abdominal pregnancy are the same as ectopic pregnancy.^{3,4}

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Abdominal pregnancy is associated with high maternal morbidity and mortality, with a risk of death 7 to 8 times greater than tubal ectopic pregnancy and 90 times greater than intrauterine pregnancy. High perinatal morbidity and mortality occur, usually due to disturbed growth and congenital anomalies such as fetal pulmonary hypoplasia, facial pressure and asymmetrical deformity and extremities. The incidence of congenital abnormalities is 20 to 40%.3,6 In abdominal pregnancy, the fetus develops in the peritoneal cavity, the placenta develops on the surface of the abdominal organs such as the pelvic peritoneum, latum ligament, uterus, omentum and intestine. The structure of these organs reacts with the growth of blood vessels to supply the placenta. Weak attachment of the placenta causes retroplacental bleeding and intra-abdominal bleeding which threatens the fetus and mother. Placental insufficiency is the cause of term fetal death if not born surgically by laparotomy. Given the high morbidity and mortality in abdominal pregnancy, pregnancy should end immediately with surgery, but in advanced abdominal pregnancy some experts try to be conservative until waiting for fetal lung maturation. Conservative measures are taken if the gestational age is above 24 weeks, the fetus lives without major abnormalities and implantation of the placenta in the peritoneal organs far from the liver and spleen and good care of mothers in the hospital with blood transfusion services available.⁵

In laparotomy, placental management is the most difficult challenge. On this occasion the researchers would like to raise a case report about abdominal pregnancy which is currently a very rare case but presents a very high risk of both morbidity and mortality for the fetus and mother.

CASE REPORT

A 36-year-old woman came to the Midwifery Polyclinic of RSUD DR. M. Zein, Painan, on July 3, 2018 at 10:00 WIB with complaints of child movements that was not felt since 2 days of SMRS. From the records then obtained complaints of child movement that was not felt since 2 days of SMRS without complaints of pain throughout the abdomen, vaginal bleeding, and tightness. From the past records of the disease obtained a history of vaginal discharge in the genitals that often recurs. This is the second pregnancy for the patient with her first child born spontaneously 4 years ago. From physical examination, it was found that the vital sign was still in a stable condition. The patient's height was 150 cm with a body weight of 55 kg. From external examination of the abdomen, the abdomen appeared to be bigger than 28 weeks of pregnancy, the TFU was difficult to determine, palpating the largest part of the fetus on the top, by the side of the arcus costae. A palpable, round, hard, bouncy left, large palpable, soft, nodular mass was felt. From Auscultation, bowel sounds was weakened and BJA was not found. From genital examination, it was within normal limits.



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Laboratory Examination, Hb: 8.6 gr / dl, Ht: 26%, Leukocytes 9800 / mm3, Platelets 138x103 / mm3, PT: 14.2 seconds, APTT 31.3 seconds. From ultrasonography, extra uterine fetal was seen, intra-abdominal under the diaphragm, suppressed the liver. Fetal movement activity (-), Fetal heart rate (-), Piles of free intra-abdominal fluid (+), Spalding sign (+), Placenta seemed embedded behind the corpus uteri, filling the douglas cavity. Biometry: FL 52 mm, with impression: gravid 27-28 weeks + abdominal pregnancy + dead fetus. The patient was diagnosed with gravid G2P1A0H1 27-28 weeks + dead fetus abdominal pregnancy + mild anemia, and planned for laparotomy preparation with a minimum Hb of 12. The patient and her families were informed about the condition of the patient was she was experiencing, the actions to be taken and the risks involved that may occur during the course of action. The patient and family agreed to perform the laparotomy and accepted any risks that may occur.

The patient was treated for 6 days for blood transfusion and preparation for laparotomy. On the 7th day of treatment, an exploratory laparotomy was performed to give birth to an intra-abdominal dead fetus. Durante surgery, obtained intra-abdominal dead fetus, with the placenta embedded in the douglas cavity by attaching to the Ascendent Colon, Rectum, descending colon, intestine and peritoneum. Release of the placenta at the attachment site. The rest of the placenta was cleaned one by one by clamping with clam punster.

DISCUSSION

In connection with this case, there are several things that will be discussed, among others:

Is the diagnosis in this patient correct?

The diagnosis in this patient was correct, because from the history to the investigation it led to an abdominal pregnancy. Although in the patient the symptoms that arose were very non-typical, the patient was 7 months pregnant, calculated according to HPHT and only complained of the child's movements that was not felt since 2 days of SMRS without any complaints of pain throughout the stomach, vaginal bleeding, and tightness. This is consistent with the theory that "there are no typical complaints and signs found in abdominal pregnancy.^{4,7} Physical examination showed that vital signs were still stable, illustrating that there was no acute intra-abdominal bleeding in this patient. This also excluded the possibility of uterine rupture in this patient.

From external examination of the abdomen, the abdomen appeared to be bigger than 28 weeks of pregnancy, the TFU was difficult to determine, palpating the largest part of the fetus on the top, by the side of the arcus costae. A palpable, round, hard, bouncy left, large palpable, soft, nodular mass was felt. From Auscultation, bowel sounds were weakened and BJA was not found. From genital examination, within normal limits. The results of the physical



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examination of the patient are in accordance with the theory that physical examination in the majority of cases with abdominal pregnancy often does not find specific findings that lead to a diagnosis of abdominal pregnancy. On abdominal examination often found tenderness, abnormal fetal position and easy to feel the fetus. On vaginal examination, cervix was found to be smaller and closed and was often pushed out of place.4 Laboratory examination, Hb : 8,6 gr/dl, Ht : 26%, Leukocytes 9800/mm3, Platelets 138x103/mm3, PT : 14,2 seconds, APTT 31,3 seconds. The patient's laboratory results described the condition of mild anemia, which eliminated the possibility of acute intra-abdominal bleeding.

From ultrasonography, it was seen extra uterine fetal, intra-abdominal under the diaphragm, suppressed the liver. Fetal movement activity (-), Fetal heart rate (-), Piles of free intra-abdominal fluid (+), Spalding sign (+), Placenta appeared embedded behind the corpus uteri, filling the douglas cavity. Biometry: FL 52 mm, with impression: gravid 27-28 weeks + abdominal pregnancy + dead fetus. This patient's ultrasound examination is in line with the criteria for alleged abdominal pregnancy which some experts formulated, including:

- 1. The fetus appears outside the uterus.
- 2. Failure to visualize the uterine wall between the fetus and the mother's urinary bladder.
- 3. The fetal part appears close to the mother's abdominal wall.
- 4. Abnormal fetal position and placental tissue outside the uterus is visible.
- 5. Location of the placenta outside the uterine cavity
- 6. Absence of amniotic fluid between the placenta and the fetal head or chest.

Is the initial management of this patient appropriate?

This patient was conservatively managed with the aim of increasing Hb levels at the start of being treated with a Hb goal of \geq 12 before a laparotomy was performed to circulate the fetus. This is appropriate, because the patient's condition at the time of entry illustrated a stable vital sign condition without any signs of acute intrabadomen bleeding that would require immediate operative action. This was to avoid the risk of massive bleeding that may occur during the process of abdominal pregnancy. Maternal mortality was 7.7 times higher in abdominal pregnancies compared to tubal ectopic pregnancies and 90 times higher when compared with intrauterine pregnancies. The risk is related to late diagnosis and mismanagement of the placenta.^{6,11} Preoperative preparation is very important considering the greatest risk faced in surgery is heavy bleeding. When we diagnose an abdominal pregnancy the advanced stages of surgical preparation must be well prepared. At least 6 blood bags that have been cross-mathed must be prepared and other blood products must be available.^{6,12}



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Whether the removal of the placenta from implantation is appropriate for this patient?

Durante surgery is carried out exploration of the placental attachment site. Obtained the placenta embedded in the douglas cavum by attaching to the Ascendent Colon, Rectum, descending colon, intestine and peritoneum. It appeared that some of the placenta was detached from its implantation, accompanied by a pile of stout cells. Removal of the placenta was carried out throughout the attachment site. The rest of the placenta was cleaned one by one by clamping with the clam punster slowly. Taking into account the bleeding that took place during the operation, the operator decides to remove all the placenta from the implant site. This is correct, but very risky.

Most experts recommend leaving the placenta in place as one of two bad choices. The placenta still functions until 50 days after surgery and complete absorption after 6 months, but has been reported for up to 5 years. Postoperative monitoring if the placenta is left in place with ultrasound, levels of β hCG and colour doppler. Methotrexate has been tried out to accelerate the absorption of the placenta but often causes complications of extensive necrosis to sepsis.^{1,4}

Release of the placenta from its place is associated with several factors such as location, blood vessels supplying the placenta, complications that occur in surgery and intraoperative bleeding. If the supplying blood vessels are identified and can be well ligated, removal of the placenta is recommended. In some cases, when releasing the placenta intraabdominal bleeding occurs, ligation of important blood vessels such as internal iliac arteries can be done for life saving.^{4,7}

Is this patient included as a primary or secondary abdominal pregnancy?

In the patient it was likely a primary abdominal pregnancy. Because from her records, there was no history of bleeding from the genitals and lower abdominal pain at a young gestational age (trimester 1), both of which point to suspicion of tubal rupture or tubal abortion. Intraoperative exploration was also carried out on the left and right ovarian tubes, with no signs of perforation or rupture. Both the tuba and ovaries were without signs of new or old pregnancy there. The theory is that primary abdominal pregnancy is very rare. Early abortion usually occurs because of damage to the implantation site due to bleeding.^{7,9}

Studdiford criteria for establishing primary abdominal pregnancy :

- 1. the two normal tubes and ovaries without signs of new or old pregnancy there,
- 2. there is no sign of uteroplacental fistula,
- the existence of a pregnancy that is solely related to the surface of the peritoneum and is early enough to eliminate the possibility of secondary implantation after primary nidation in the tube.¹⁰



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What are the risk factors for abdominal pregnancy in this patient?

Basically all sexually active women have a risk of having an abdominal pregnancy. If without risk factors, the incidence of abdominal pregnancy is estimated to range from 1-2%. But if there are several risk factors, then the possibility for abdominal pregnancy is around 25%.⁷ Cunningham et al. divided risk factors for ectopic pregnancy into high, moderate and low risk. High-risk ectopic pregnancy is a history of tubal surgery, history of ectopic pregnancy, use of diethylstilbestrol, history of AKDR use and the presence of pathological abnormalities in the tube. Moderate risk is infertility, genetal organ infection and multiple partners. While the low risk is a history of abdominal or pelvic surgery, smoking, and sexual relations of less than 18 years.⁷

From the history of this patient, there was no history of previous ectopic pregnancy, no history of tubal surgery, no history of hormonal contraception and AKDR use, no history of multiple sexual partners, no previous history of abdominal or pelvic surgery, no history of smoking and relationships sexually less than 18 years. The patient had a history of recurrent vaginal discharge, this was included as a moderate risk factor with a possible abdominal pregnancy of around 20%. If this vaginal discharge continues to recur, the possibility for the patient to have a repeat abdominal pregnancy remains. Patients with a history of previous ectopic pregnancy, have a 7-15% risk of recurrence.

CONCLUSION

Abdominal pregnancy is a part of extrauterine pregnancy or ectopic pregnancy, which is a fertilized ovum implanted in tissue other than endometrium. Abdominal pregnancy can be divided into two, namely secondary abdominal pregnancy. The incidence of abdominal pregnancy varies from 1 in 372 to 1 in 9,714 live births. Abdominal pregnancy is associated with high morbidity and mortality, with a risk of death 7 to 8 times greater than tubal ectopic pregnancy and 90 times greater than intrauterine pregnancy. Risk factors for abdominal pregnancy are the same as ectopic pregnancy.

Establishing a diagnosis is a challenge in which only 40% are diagnosed before surgery. No typical complaints and signs are found in abdominal pregnancy, ultrasound and MRI are modalities in establishing the diagnosis. Surgical management must be considered once the diagnosis is established. There are times when conservative measures are taken while waiting for lung maturation but must meet several conditions including the mother, fetus, and placental location. Surgery aims to evacuate the fetus and evacuate the placenta. The most feared complication is massive bleeding from partial detachment of the placenta.

Most experts recommend leaving the placenta in place as one of two bad choices. The placenta still functions until 50 days after surgery and complete absorption after 6 months, but has been reported for up to 5 years. Postoperative monitoring if the placenta is left in



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place with ultrasound, β hCG levels and color doppler. Methotrexate has been tried to accelerate the absorption of the placenta but often causes complications of extensive necrosis to sepsis.

Maternal mortality varies from 0-30% in various cases of abdominal pregnancy and can only be reduced by early diagnosis and prompt intervention. With careful operation planning the mortality rate can be reduced from around 20 percent to less than 5 percent. The rescue of the fetus in an abdominal pregnancy depends on the gestational age. For fetuses reported above 30 weeks of pregnancy can only survive 63% with 20% experiencing information. The most common deformity found in the fetus is facial deformity or cranium or both and various joint abnormalities. The most common malformations are deficiency of extremities and anomalies of the central nervous system.

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