Case Report

Unusual Location: Omental Ectopic Pregnancy Interesting Case Report

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Abstract

Objective: Omentum pregnancy is an ectopic pregnancy in the abdominal cavity. The event has high morbidity and mortality. The purpose of this case is to present a rare case of abdominal ectopic pregnancy that occurred in a young woman.

Methods: Case report.

Results: A 22-year-old woman at 16 weeks gestation presented with abdominal pain and clinical shock. Examination results revealed pregnancy outside the womb, with an estimated fetal weight of 193 grams and positive heart activity. The patient underwent laparotomy surgery, revealing that the pregnancy had occurred in the omentum organ with placental attachment.

Conclusion: In this case, emergency management began with the patient's reception in the emergency department, followed by laparotomy exploration. After a meticulous surgery, the pregnancy's location was identified in the omentum, and the evacuation of pregnancy products was performed. The patient received treatment for several days until being discharged home. Early diagnosis and interprofessional management are crucial if similar conditions are suspected in the future to prevent morbidity.

Keywords: abdominal cavity, ectopic pregnancy, omental pregnancy.

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INTRODUCTION

Ectopic pregnancy refers to fertilization and implantation outside the uterine cavity, including the fallopian tubes, cervix, ovaries, uterine horn region, and abdominal cavity.[1] Approximately 0.34% to 1.3% of all ectopic pregnancies are abdominal pregnancy, with only 9% found in omentum.[2] Abdominal pregnancy is a rare form of ectopic pregnancy within the peritoneal cavity, exclusive of the fallopian tubes, ovaries, broad ligament, and cervix. It is associated with high maternal and fetal morbidity and mortality.[3,4] Some of the risk factors identified include a history of pelvic inflammatory disease (PID), a history of previous ectopic pregnancies, previous spontaneous abortion, and uterine deformities.[5] A literature review on Medline for the period 1958-2012 reported only 16 cases of omental pregnancy.[6] Considering the very few case reports of omental pregnancy and the absence of clinical symptoms that appear in early pregnancy, the diagnosis is delayed and requires immediate identification before rupture occurs. Sign and symptoms in patients vary depending on the site of implantation, and only 20-40% of cases are diagnosed before surgery.[7] In this case report, we will report the multiparous pregnant woman with hemoperitoneum due to ruptured omental ectopic.

CASE

A 22-year-old woman, 16 weeks gestational age gravida 2 presented to the emergency department (ED) of Gadjah Mada Academic Hospital, Yogyakarta, and was referred from another hospital with complaints of abdominal pain felt since 2 weeks ago. She was a healthy woman without known illnesses. Since her menarche was 14 years old, previous menses were regular every month, and there was no delay in her menses. Sudden complaints became more aggravating and felt throughout the abdomen from the day before the patient entered the hospital until the patient had difficulty standing

up and defecating. The patient does not know that she is pregnant. When the first complaint appears, it does not interfere with the activity, so the patient does not check her condition. When complaints incriminate the patient to check her condition and an ultrasound examination is carried out, it is said that the patient has a pregnancy outside the uterus.

The patient was then given temporary treatment with anti-pain, but complaints did not decrease, and the patient was referred to our hospital. Clinically, the vital signs examination found that the patient's tension was already very low, 89/60mmHg and a pulse rate of 105 beats per minute. For physical examination of the abdomen, pressure pain was found in the entire abdomen. The vaginal examination was essentially normal, without bleeding seen. Furthermore, an ultrasound examination was carried out and revealed an empty uterus with pregnancy products with a biparietal diameter (BPD) 38.2 mm, femur length (FL) 20.9 mm, estimated fetal weight 193 grams, with cardiac activity positive and intra-abdominal free fluid positive. (Figure1)

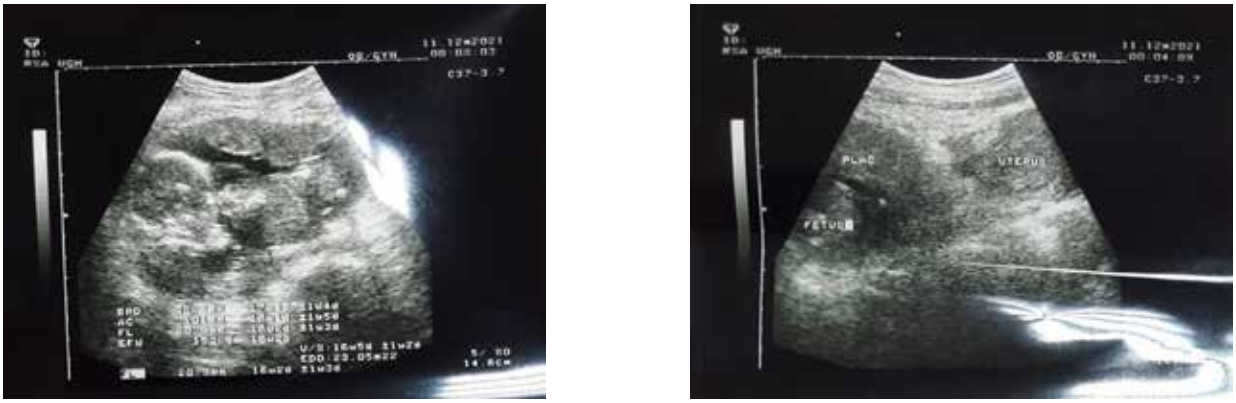

Figure.1 Sonography: Appearance of pregnancy products in the abdominal cavity.

The day after the patient's treatment, a laparotomy exploration of collaboration between the obstetrician and gynecologists and general surgeon is carried out. (Figure 2) In the surgery report, evacuation of abdominal pregnancy products has been carried out, and there is also internal bleeding due to placental separation and omental adhesions. (Figure 3) After surgery the patient is placed in an intensive room for one day following the development of the condition and is then transferred to general ward. Patient receive postoperative packet red cell treatment along with other therapies such as anti-pain, and antibiotics. Patients are also given education to mobilization gradually with a programmed diet as needed. The treatment of complaints gradually improved, the patient recovered and was discharged home five days later. The patient was discharged several days with a case of omental pregnancy.

Figure.2 Pregnancy products on omentum tissue

Figure.3 The fetus along with the placenta to the abdominal omentum tissue.

DISCUSSION

Ectopic pregnancy (the term ectopic comes from the Greek word ectopic) means to be outside, and abnormal implantation as gestational growth creates the potential for organ rupture because only the uterine cavity can accommodate the growing fetus.[1] Early diagnosis is important so that treatment and results obtained are optimal.[8] An optimal fallopian tube environment is required to facilitate oocyte transport, fertilization, and migration of the early embryo to the uterus for implantation. Transport of oocytes and embryos through the tubes, with the help of smooth muscle contractions and ciliary lining, is influenced by several local factors, including immunological, hormonal, toxin, and infection.[9] There is an increase in pro-inflammatory cytokine activity, which causes tubal damage, so cell transport does not go well. Chlamydia trachomatis infection causes the production of interleukin-1 by tubal epithelial cells, which later recruits neutrophils and damages the fallopian tubes.[9–11]

Half women with an ectopic pregnancy were found to have no risk factors.[12] Several of the identified risk factors for ectopic pregnancy include a history of ectopic pregnancy and previous fallopian tube surgery, using an intrauterine device, suffering from pelvic inflammatory disease, congenital uterine anomalies, infertility, history of smoking, endometriosis, use of assisted reproductive technology and history of pelvic of abdominal surgery.[13] Among the risk factors described above, women with a history of previous ectopic pregnancy have a greater chance of recurrence, and this will increase to 25% if the is a history of ectopic pregnancy in two or three previous pregnancies.[12]

What is interesting about this case is that in this patient there were no risk factors that support the occurence of ectopic pregnancy. In this woman, the previous pregnancy history was done normally and did not have a history of any surgery. Previous labor history is also by vaginally. Then the complaints he got also appeared after a few weeks until the second trimester. In abdominal ectopic pregnancy, this condition makes it difficult for practitioners to diagnose early until advanced management.

The incidence of ectopic pregnancy is estimated in the general population to be 1 to 5% in patient using assisted reproductive technology. Ectopic pregnancies occurring outside the fallopian tubes account for less than 10% of all ectopic pregnancies. Pregnancies implanted in the abdominal cavity are approximately 1,3%. In one of the studies conducted in Indonesia regarding the incidence profile of ectopic pregnancy. Of the 98 samples, 30,6% of the patients had a range of 26-30 years, the use of hormonal contraception was found more often than an intrauterine device, 7% of patients were repeat cases, 12,1% of patient had a history of surgery in the abdominal or pelvic area, and most ectopic pregnancies were found in the first pregnancy and as many as 26,4% of patient accompained by aggravating infection.[14]

Women with an ectopic pregnancy will complain of pelvic pain, but not all ectopic pregnancies will have this feature. Women of reproductive age who complain of pelvic pain, abdominal pain, nausea/vomiting, dizziness, and vaginal bleeding should be determined whether the patient is pregnant.[12,15] The examiner needs to identify various risk factors for ectopic pregnancy in the patient's history, such as history of previous ectopic pregnancy and history of fallopian tube damage (history of pelvic inflammatory disease, tubal surgery) of pregnancy with assisted reproductive technology.[16–18]

Signs and symptoms of ruptured ectopic pregnancy, such as hemodynamic instability or acute abdomen need to be evaluated and treated promptly. In addition to the physical and obstetric examination, it is necessary to carry out other supporting examinations to confirm an ectopic pregnancy. Diagnostic minimal evaluation of suspected ectopic pregnancy by transvaginal ultrasound examination. Then to confirm pregnancy, serial examination with transvaginal ultrasonography and serum hCG level was carried out.[12]

Interventions for treating ectopic pregnancies include the administration of systemic methotrexate, surgery, and expectancy. Candidates of expectant treatment must be asymptomatic and have no evidence of rupture or hemodynamic instability.[19] Patients with low hCG levels can be treated with a single and double-dose methotrexate (MTX) protocol if hCG levels are high. Surgical treatment, including salpingostomy or salpingectomy, is required when the patient has features of intraperitoneal bleeding, and symptoms of ectopic rupture of hemodynamic instability.[12] Patients with relatively low beta hCG levels have a better prognosis following treatment with a single dose of MTX. On the other hand, if the patient's hemodynamic

are unstable, they tend to be more at risk of worsening due to haemorrhagic shock or other complications.[19,20]

Abdominal pregnancy, especially in omentum, is an interesting case where it is rare. Many cases of ectopic pregnancy occur in the fallopian tube and found a history that supports the occurrence of cases such as a history of previous ectopic pregnancies, smoking, damage to tubal tissue due to infections like PID, and use of assisted reproductive organs. However, in this case none of these risk factors were found and this condition is supported by literature that states there are some cases of ectopic pregnancy that do not have risk factors.

CONCLUSION

Omentum ectopic pregnancy is a rare occurrence where treatment in the form of diagnosis and therapy must be carried out immediately. Suspicion of omentum pregnancy should be considered if you find complaints of abdominal pain in pregnant women. In this case, the clinical symptoms of omentum pregnancy are uncertain. Most patients have sudden abdominal pain even though this condition is only discovered after a few weeks of pregnancy. The point that needs to be considered is that an in-depth history and examination are needed to confirm this incident. Because this condition is rare clinicians are expected to be vigilant about the condition to avoid possible morbidity and mortality that can occur.

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