

Case Report

Placenta increta as an important cause of uterine mass after first-trimester Curettage (case report)

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Abstract

Placenta increta during the first trimester of pregnancy is very rare. This report describes two cases of placenta increta that caused prolonged vaginal bleeding after a first-trimester abortion. We were encountered two cases of placenta increta in October 2012 and May 2013. Case I: A 35-year-old patient with continues vaginal bleeding from 2 months after curettage due to missed abortion in the first trimester. The uterus was large, the human chorionic gonadotropin (BHCG) level was 112 mUI/mL and ultrasound showed an echogenic mass in the lower segment of the uterine cavity. She was a candidate for curettage but received hysterectomy because of massive vaginal bleeding. Pathology reported placenta increta. Case II: A 32-year-old patient in the 12th week of gestation with missed abortion. After 6 weeks from curettage, she returned with continues vaginal bleeding, BHCG = 55 mUI/mL and sonography showing mixed echo lesion in the uterine cavity like hydatiform mole. Total abdominal hysterectomy was performed. Pathology reported placenta increta. In patients with a history of recent first-trimester abortion presenting with prolonged vaginal bleeding, uterine mass and low-level BHCG, a diagnosis of abnormal placentaion should be kept in mind.

Key Words: Placenta increta, uterine mass, vaginal bleeding

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INTRODUCTION

Upon hearing the report of abnormal placenta attachment to the myometrium during pregnancy, to remind us about severe vaginal bleeding, cesarean hysterectomy, blood transfusion and the sequel,^[1] placenta increta is a rare and life-threatening complication of pregnancy. Women at greater risk are those who have myometrial damage caused by

a previous cesarean delivery with placenta previa overlying the uterine scar. Placenta increta has been increasing in incidence because of the increasing prevalence of cesarean delivery in recent years. It is creates as a result of the complete or partial absence of deciduas basalis.^[2] Ideally, first suspicion for placenta accrete is stimulated by findings on obstetrical ultrasound while the patient is asymptomatic.^[3] Differential diagnosis of prolonged vaginal bleeding after first-trimester abortion is metritis, retained placenta, placental polyp, gestational trophoblastic tumors and abnormal placenta adherence.^[4] Manifestation of placenta increta after a dilation and curettage is extremely rare, but it is clinically significant as it can cause postcurettage bleeding and management is difficult.^[5-7] We present two cases of placenta increta with different chief complaints that were referred to our hospital.

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CASE REPORTS

Case 1

A 35-year-old woman, gravid 5, para 3, abort 2, was referred to our clinic because of continuous vaginal bleeding from 2 months ago after uncomplicated curettage with missed abortion at the first trimester (GA: 12 w + 4 d). Her obstetric history was notable for two previous low-transverse cesarean section deliveries and two curettages were without any complication. The pathology report after curettage was confirmed to be decidual tissue.

Physical examination was normal. The gynecologic examination of the vulva and vagina was normal, the cervix was closed, the uterus was larger than normal at about 10-12 weeks of gestation, retrovert axis and she had mild bleeding. In the clinical test, her Hb was 12.4, U/A was NL (without hematuria), BHCG was 112 mUI/mL and other coagulation tests, hepatic and renal tests and electrolytes were normal. Transvaginal sonography was performed as requested: UT > NI, retrovert uterus, endometrial thickness = 2.6 mm, hypoechotic mass about 8 cm in the lower uterine segment with necrotic change and increased vascularity with low resistance was seen around it [Figure 1]. Differential diagnosis included invasive mole, chorio carcinoma and uterine tumors, including degenerating myoma. Total abdominal sonography and chest X ray were normal. Surgical intervention was suggested and arranged to confirm the diagnosis and to remove the lower uterine segment mass. Surgery was performed with the patient under general anesthesia and in the 15-degree Trendelenburg position. A Foley catheter was inserted preoperatively to empty the bladder. She received suction and curettage. After removing the debris and much necrotic tissue, vaginal hemorrhage could not be controlled during operation. The decision fell on laparotomy. The lower segment uterine mass appeared as a large, friable, highly

vascularized mass that occupied the whole thickness of the uterine. Hysterectomy was performed immediately for treatment of hemorrhage-induced hypotension, fluid replacement and packed blood cells and blood products were administered [Figure 2]. For more than care, she was transferred to the Intensive Care Unit. On the day after surgery, the BHCG level decreased to about 13 mUI/mL. The patient was discharged on the third postoperative day after an uneventful recovery. Definitive pathology of the surgical specimen led to a diagnosis of necrotic and hemorrhagic placental tissue, consistent with placenta previa and placenta increta [Figure 3].

Case 2

A 32-year-old gravid 3, para 2 woman with a history of one prior cesarean section was referred to the Department of Obstetrics and Gynecology because of continuous vaginal bleeding from 3 weeks ago. The present gravidity was conceived spontaneously; it was detected in the 12th week of gestation. Physical examination and gynecologic examination of the vulva and vagina were normal. The cervix was long and rigid and mild vaginal bleeding was detected. Vaginal ultrasonography demonstrated a mass in the uterus and it was suspected to be gestational sac without fetal pole, with one of the differential diagnoses being molar pregnancy. Dilatation and curettage was down for patients and some tissue was extracted. In the curettage, she has severe vaginal bleeding that was immediately controlled with oxytocin and misoprostol. After 2 days, she was discharged from the hospital without any problems. The D&C pathology report was placenta velocity. After 1.5 months, she returned with continuance minimal and intermittent vaginal bleeding. In the physical examination, she was anemic but had stable hemodynamic, her uterine size about 14 weeks with soft and nontender uterus, cervix was closed and vaginal bleeding was less than menses

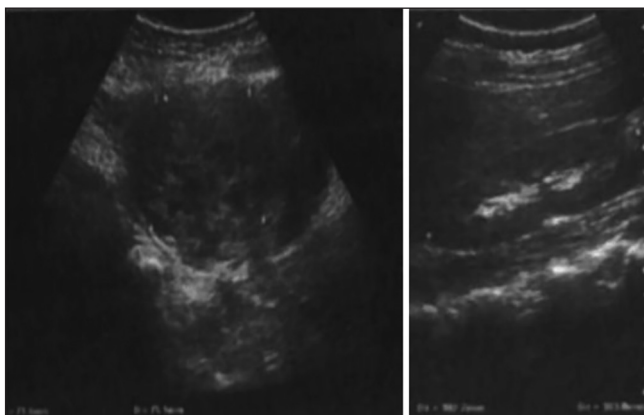


Figure 1: Sonography view of hypoechotic mass in the uterus

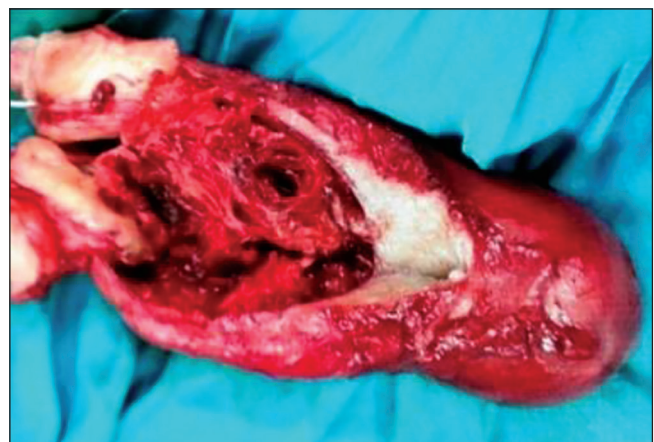


Figure 2: Uterus with lower segment mass

period. Transvaginal sonography indicated that the uterine size was 101 mm * 50 mm * 72 mm, the endometrial thickness was about 6 mm and the mixed echo lucent lesion was 48 mm * 52 mm in myometrial thickness of the lower segment alike hydatiform mole [Figure 4] and serum BHCG was 55 mIU/mL. Based on the history and sonography findings, the differential diagnosis included either a trophoblastic tumor, especially placental site trophoblastic tumor, or a uterine myoma with degeneration. A total abdominal hysterectomy was performed [Figure 5]. After surgery, BHCG became negative and histopathology reported a retained placenta increta involving the lower uterine segment without atypical trophoblastic cells [Figure 6].

DISCUSSION

Placenta accreta is a life-threatening complication of pregnancy. It is created as a result of complete or partial absence of the decidua basalis and imperfect development of the fibrinoid layer (Nitabuch layer). Risk factor of abnormal placentation has been associated with placenta previa, previous cesarean section, previous uterine curettage, multiparity (≥ 6)

and older maternal age. This condition, subclassified into placenta accreta, placenta increta and placenta percreta, depended on the depth of penetration of the placenta to the uterine wall. Placenta increta usually manifests with difficult placenta removal and severe vaginal bleeding in the third trimester. However, it may manifest with first and second trimester postcurettage hemorrhage. Many patients with this problem have no preceding symptoms and early diagnosis is based on high suspicion and notice to the risk factors. For preserving the uterus with medical therapy or conservative surgical therapy, for example uterine artery embolization, it is important that we consider this differential diagnosis before second surgery. In case I, because the patient was referred to our hospital from a private center, we suspected retained placenta but, unfortunately, we did not have time to perform Doppler or contrast-enhanced sonography. In case II, because of the presence of an empty uterine cavity and mass in the myometrium, we suspected placental site trophoblastic tumor and decided to perform total abdominal hysterectomy.

Clinical presentation of placenta increta in the first trimester of pregnancy based on previous reports was uterine rupture,^[5] massive acute bleeding immediately after dilatation and curettage,^[6] persistent vaginal bleeding after curettage,^[7] intraperitoneal bleeding after an uncomplicated dilatation and curettage in the first trimester and uterine mass.^[8] Ju *et al.* reported the first case of placenta increta that manifested

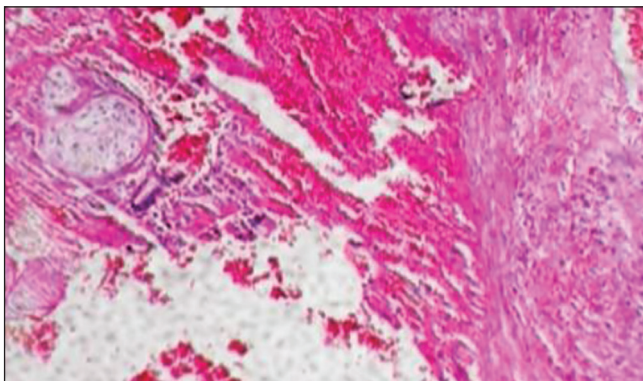


Figure 3: Histopathology examination demonstrates trophoblastic invasion into the myometrium

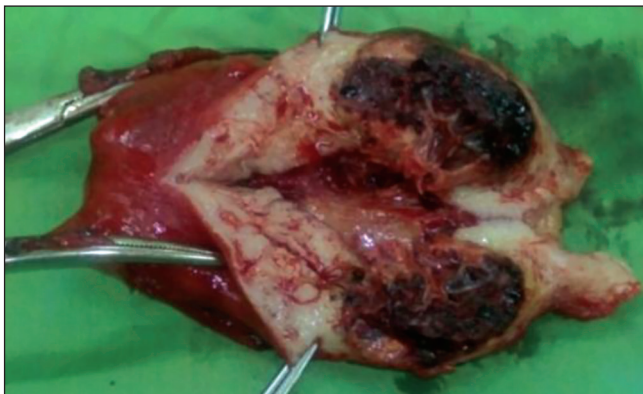


Figure 5: Uterine mass in the lower segment after pathology shows placenta increta

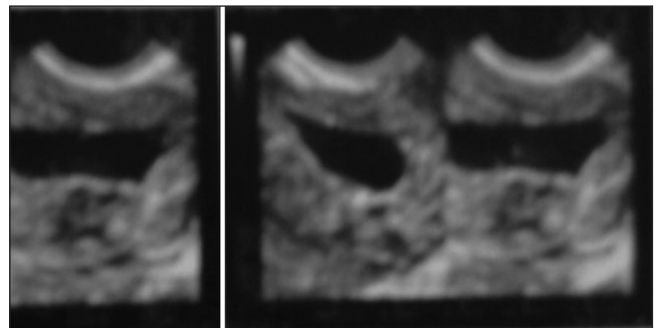


Figure 4: Mixed echo lesion in the uterine cavity

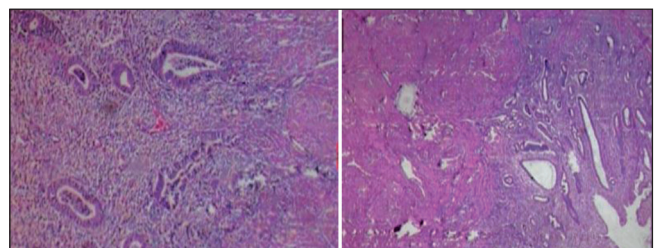


Figure 6: Histopathology examination demonstrates trophoblastic invasion into the myometrium

with uterine mass 2 weeks after first-trimester abortion. They described the magnetic resonance imaging finding of a mass in the myometrium.^[9] Lim *et al.* reported a woman with uterine mass 3 years after dilatation and curettage for a first-trimester abortion.^[10] Similar to our cases during curettage, she had severe vaginal bleeding and an emergency hysterectomy was performed. The pathology finding was placenta accreta.

Our patients in the current report had common risk factors, including prior cesarean sections and D&C procedures. Clinical history, radiologic findings and elevated HCG helps the obstetrician to diagnose a retained placenta abnormality. Therefore, we fill the gap junctions of abnormal placenta attachment in the differential diagnosis of first-trimester vaginal bleeding, especially uterine mass after first-trimester abortion.

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