

Case Report

Placenta increta, mimicking gestational trophoblastic disease and cesarean scar pregnancy, diagnosed eleven months after delivery: A case report

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Abstract

There are many causes of postpartum hemorrhage, including traumatic hemorrhage from perineal incision, coagulation defects and uterine atony. Abnormal adherence of placenta, Cesarean scar pregnancy and gestational trophoblastic disease are other diseases that may cause of postpartum hemorrhage. Three of these clinical entities are associated with high rates of maternal morbidity and mortality. Here we report the case of a woman with a diagnosis of placenta increta that manifested as an unusual lower segment uterine mass, it caused prolonged but not catastrophic bleeding after delivery.

Key words:

Placenta increta, cesarean scar pregnancy, gestational trophoblastic disease

Introduction

Abnormal adherence of the placenta is subclassified into placenta accreta, increta and percreta, the classification based on the depth of penetration of the placental tissue [1]. Retained placenta increta can cause catastrophic postpartum hemorrhage. Cesarean scar pregnancy (CSP) is the rarest form of ectopic pregnancy. The incidence of this rare condition is likely to increase with the increasing rate of cesarean sections. Unintended consequences of the rising cesarean section rates are abnormal adherence of the placenta and CSP in subsequent pregnancies. Gestational trophoblastic neoplasia (GTN) broadly encompasses a spectrum of benign

and malignant diseases of the chorionic portion of the placenta. Three of these clinical entities are associated with high rates of maternal morbidity and mortality. Here we report the case of a woman with a diagnosis of placenta increta that manifested as an unusual lower segment uterine mass, it caused prolonged but not catastrophic bleeding after delivery. Uterine curettage and total abdominal hysterectomy (TAH) were performed as management and the placental tissue was completely removed successfully.

Case presentation

A 20-year-old woman, gravida 2 para 1, with a history of a previous cesarean operation and with a history of miscarriage abortion treated with curettage, was referred for spotting vaginal bleeding at 11 months later after cesarean operation. There was not any problem during previous pregnancy and the cesarean operation. Placenta and membranes were separated fully and completely spontaneous in the operation. Laboratory tests revealed β -human chorionic gonadotropin (β -hCG) level of 265 mIU/

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ml and anemia with hemoglobin value of 11.9 hematocrit of 35. Transvaginal ultrasonography (US) was performed. Initial transvaginal US images showed an 45x60 mm echogenic mass in the isthmus of uterine and cervical area.

Figure 1.



Ultrasonographic image of uterine isthmus mass.

Color doppler US revealed intense of the mass hypervascularity. Resistance index (RI) value of the mass was 0,37. There was no evidence of extension of the mass into the surrounding soft tissues, and no adnexal masses were identified. All of these findings strongly supported GTN (probably invasive mole) and/or CSP diagnoses. Firstly patient has underwent an curettage procedure after council decision. During the uterine curettage, catastrophic uterine hemorrhage occurred. Two units of packed red blood cells, 4 units fresh frozen plasma, and 4 grams fibrinogen were transfused. Uterine curettage and uterine massage were performed to reduce bleeding but failed. So the patient was operated. Pfannenstiel incision was performed. All abdomen was explored for non obstetric and obstetric pathology. Uterus and both ovaries were in normal integrity. Right pelvic side wall and servix were invaded by approximately 5-6 cm mass which originated from the uterine isthmic area. The peritoneum of the bladder was on the mass. TAH and salpingectomy was performed to reduce expected bleeding. During the operations five units blood cells, four units fresh frozen plasma, 4 gr fibrinogen were transfused and the bleeding was controlled. The patient was discharged without any complications 8 days after the operation. The intraoperative surgical findings suggested that the diagnosis may be placenta increta, CSP or GTN. Final diagnosis of the clinical entity was detected as placenta increta after the pathological examination of the lesion (Figure 3).

Discussion

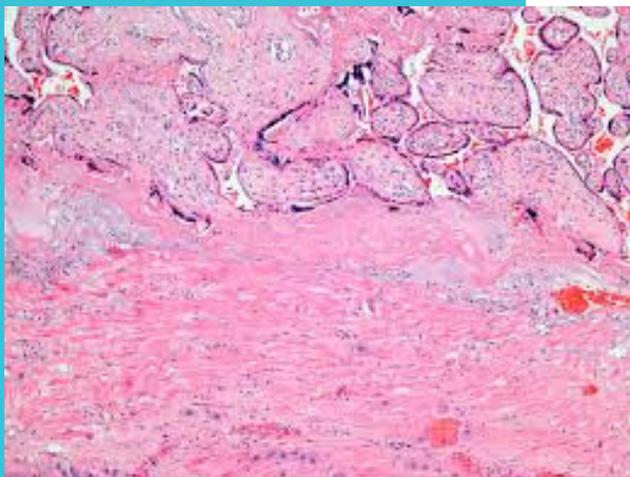
There are many causes of postpartum hemorrhage, including traumatic hemorrhage from perineal incision, coagulation defects, and uterine atony [1]. Retained placental tissue is another major cause of postpartum hemorrhage. Retained placental tissue has three classifications; avulsed cotyledon, succenturiate lobe and abnormal adherence of placenta. Placenta accreta vera is defined as placental adherence to myometrium caused by focally absent decidua basalis.

Figure 2.



The case during operation

In a normal pregnancy, the placenta is formed at the implantation site by a combination of the chorion frondosa and the decidua basalis. When the decidua is partially or completely absent, abnormal placental implantation may occur. In a study by Miller et al. placenta previa was seen in nearly all cases of placenta accreta and in its absence the diagnosis was uncommon [1]. Placenta increta means invasion of chorionic villi into the myometrium. Penetration of the chorionic villi completely through the myometrium is called placenta per

Figure 3.*Placenta increta*

creta. Normally attached placenta can slough off easily and doesn't cause catastrophic hemorrhage; however, aggressive detachment of retained placenta may cause catastrophic hemorrhage. Therefore, obstetricians should be aware of the residual content of the uterine cavity. If the residual part of placenta remains in the cavity, the form of adhesion of the placenta is important in determining the type of treatment. The degree of vascularity is also an important factor. CSP is an ectopic pregnancy implanted in a previous cesarean scar. Such implantation occurs in approximately 1 in 2000 pregnancies and accounts for 6% of ectopic preg-

nancies among women with a prior cesarean delivery in high-income countries [2]. Diagnosis is usually made via vaginal or abdominal US. Many studies determining the ultrasonographic and magnetic resonance imaging views of CSPs have been published [3,4]. Comstock et al. retrospectively reported the prenatal sonographic findings of six cases placenta accreta with previous cesarean delivery, in which US examination has been performed prior to 10 weeks gestation. These cases all showed gestational sac located in the lower uterine segment at the site of the cesarean section scar and they were all proven to have placenta accreta by histological examination [5]. GTNs contain paternal and placental chromosomes, rather than maternal, in origin. The most common presenting symptoms are vaginal bleeding and a rapidly enlarging uterus, and GTN should be considered whenever a premenopausal woman presents with these findings. Because the vast majority of GTN types are associated with elevated β -hCG levels, so an β -hCG blood level and pelvic US are the initial steps in the diagnostic evaluation. Here we report the case of a woman with a diagnosis of placenta increta that manifested as an unusual lower segment uterine mass, it caused prolonged but not catastrophic bleeding after delivery. Our case suggest that in women at risk for invasive placentation, Placenta increta, CSP and GTN should be kept in mind as differential diagnosis.

Acknowledgement

None

Conflict of Interest

Authors declare no conflict of interest.

References

1. Cunningham FG, MacDonald PC, Gant NF et al. Disease and abnormality of the placenta in: Williams Obstetrics, 20th edn. 1997 p-645
2. Cunningham FG, Leveno KL, Bloom

SL. Cervical pregnancy in: Williams obstetrics, 23rd edition. 2010 p-253-4

3. Molinaro TA, Barnhort KT. Abdominal pregnancy, cesarean scar pregnancy, and heterotopic pregnancy. www.uptodate.com. Literature review current through: Nov 2015

4. Maecowa A, Tsutsumi S, Kurechi H. Three cases of cesarean scar pregnancy. J.Jpn. SOG Perin Neon Med 2010;46(3):867-71
5. Kim SJ. Placental site trophoblastic tumor best pract res clin obstet gynecol 2003;17:969-984