case reports

Placenta accreta at 16 weeks associated with polyfibromatosis and consecutive hysterectomy. A case report

Abstract

Placenta accreta is defined as an abnormal attachment of the placenta to the uterine wall with abnormal bond of the placental villi through the endometrium, directly into the myometrium. We report a case of a 38-year-old pregnant, gravida 3, para 1, with a previous cesarean delivery 10 years ago and known with uterine polyfibromatosis that presented to our emergency unit at 16 weeks of amenorrhea with diffuse abdominal ache and mild vaginal hemorrhage. The emergency ultrasound examination revealed uterine polyfibromatosis, incomplete miscarriage and suspected abnormal placentation. A dilation and curettage was performed. Due to persistent active vaginal bleeding and to the hemodinamicaly instability of the patient a second emergency ultrasound was performed and revealed a retained, adherent placenta on the anterior uterine wall. Therefore, an emergency laparotomy with abdominal hysterectomy was performed. Histopathology revealed a polyfibromatous uterus and placenta accreta adherent to isthmic fibroid tumors. Abnormal adherent placentation can significantly increase maternal hemorrhagic morbidity, thus when a prenatal diagnosis of placenta accreta is confirmed or suspected, it is necessary to implement a multidisciplinary approach. Keywords: abnormal placentation, placenta accrete, polyfibromatosis, emergency hysterectomy

Introduction

Placenta accreta is a severe obstetrical pathology that demands a multidisciplinary team. It is defined as an abnormal attachment of the placenta to the uterine wall with abnormal bond of the placental villi through the endometrium, directly into the myometrium, due to a defective or an absent decidua basalis⁽¹⁾.

Case Report

We report a case of a 38-year-old pregnant, gravida 3, para 1, with a previous cesarean delivery 10 years ago and known with uterine polyfibromatosis that presented to our emergency unit at 16 weeks of amenorrhea with diffuse abdominal pain and mild vaginal bleeding At admission, she was hemodynamically stable with Hg=10.4 g/dL. Local examination revealed an opened cervical ostium and medium vaginal hemorrhage. The emergency ultrasound examination reported a single pregnancy, 16 weeks age, with no cardiac activity, 4 subserosal fibroid tumors (i.e. the largest one pedunculated 5/5cm, on the anterior uterine wall) and 5 intramural nodules (e.g. the largest one located supraisthmic 6/5cm), anterior placenta with Doppler images suggesting placenta accreta underlying the supraisthmic node. Large retroplacental hematoma, central umbilical cord and normal amniotic fluid amount. Clinical diagnostics were incomplete miscarriage, suspected abnormal placentation and uterine polyfibromatosis. A dilation and curettage was performed. Due to persistent, active bleeding, not responsive to uterine bimanual massage, oxitocine and ergometrine perfusion, suturing of the cervico-vaginal pedicles, a second emergency ultrasound was performed and revealed a retained, adherent placenta on the anterior uterine wall. At that time the patient was hypotensive and tachycardic (i.e. blood pressure=80/40 mmHg and heart rate=118 bpm) thus an emergency laparotomy with abdominal hysterectomy was decided. During surgery due to a blood loss of 1500 cc the patient received 2 units of packed blood and 1 unit of fresh frozen plasma. Postoperative complete haemogram and coagulation profile were within normal limits.

Macroscopic examination of the hysterectomy specimen revealed an enlarged uterus of 16/10/8 cm, with multiple subserosal pedunculated and intramural fibroid tumors and inside the uterus a myometrium adherent tumoral tissue measuring 6/4 cm. Histopathology examination confirmed abnormal placentation. Microscopically, a placenta accreta with placental villi interdigitate directly into the uterine myometrium, without an intervening decidual plate was observed (Figure 1).

Discussion

The incidence of placenta accreta has increased in the last decades mostly due to the rising rates of cesarean April 17, 2017

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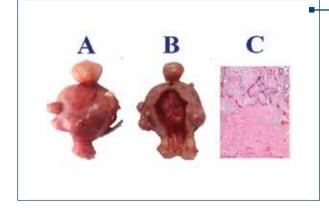


Figure 1. A. Macroscopic aspect of the hysterectomy specimen, numerous fibroid tumors; B. Macroscopic aspect of the tumoral adherent tissue mass inside the uterus, infiltrating the myometriumunderlying a isthmic intramural fibroid tumor-retained, adherent placenta; C. Microscopic aspect of the tumoral adherent tissue mass inside the uterus suggesting placenta accreta: placental villi interdigitate directly with the uterine myometrium, without an intervening decidual plate

section delivery mode. The actually reported incidence rate is about 1:500 deliveries⁽²⁾. Predisposing factors for abnormal include cervical dilations and curettages, endometritis, sub mucous myomas and uterine scars like those resulted after a cesarean section^(3,4).

Disruption of the endometrial-myometrial interface at the time of uterine surgery merges the risk of abnormal placental adhesion in a subsequent pregnancies, which is mostly due to the absence or incomplete formation of the Nitabuch fibrinoid membrane that is present in normal placentation^(1,5).

Abnormal adherent placentation can significantly increase maternal hemorrhagic morbidity when encountered during a dilatation and evacuation or curettage performed for a first or second trimester pregnancy incomplete miscarriage⁽²⁾. Antenatal diagnosis of placenta accreta provides the opportunity for an appropriate surveillance for antepartum, intrapartum and postpartum complications^(1,3,4).

The diagnosis is made primarily using second or thirdtrimester imaging but sonographic markers of placenta accreta are present as early as the first trimester. The known sonografically criteria for abnormal placentation are: the absence of a normal, hypodense retroplancentar myometrial aria, a reduced or absent surface between uterine serosa and urinary blader^(1,4,5,6). First trimester specific findings include unexpected low implantation of the gestational sac and an irregular appearance of the developing placental-myometrial interface^(1,2,5). The prenatal diagnose for placenta accreta can be difficult and some studies suggested that magnetic resonance imaging may be used to make a closer diagnosis^(1,4,6).

Conclusions

The incidence of placenta accreta is rapidly rising worldwide, and is closely related to the increasing cesarean rate. Abnormal adherent placentation can significantly increase maternal hemorrhagic morbidity thus when a prenatal diagnosis of placenta accreta is confirmed or suspected, it is necessary to implement a multidisciplinary approach. Ultrasonographic markers of placenta accreta are present as early as in the first trimester but in some cases the assessment for placenta accreta can be difficult and magnetic resonance imaging may be used to make sure a prenatal diagnosis.

In the present case the emergency hysterectomy was chosen as a consequence of the immediate clinical circumstances.

References

- Ballas J, Pretorius D, Hull AD, Resnik R, Ramos GA. Identifying sonographic markers for placenta accreta in the first trimester. J Ultrasound Med 2012, 31(11), 1835-41.
- Wu S, Kocherginsky M, Hibbard JU. Abnormal placentation: twenty year analysis. Am J Obstet Gynecol 2005, 192(5), 1458-61.
- Gupta N, Gupta A, Green M, Kang HS, Blankstein J. Placenta percreta at 17Weeks with Consecutive Hysterectomy: A Case Report and Review of the Literature-Case Reports in Obstetrics and Gynecology Volume 2012, Article ID 734834, doi:10.1155/2012/73483.
- 4. Russo M, Krenz EI, Hart ST, Kirsch D. Multidisciplinary Approach to the Management of Placenta Accreta. The Ochsner Journal 2011, 11, 84-8.
- Ionescu Z, Ionescu G, Cirstoiu M, Bodean O, Sajin OM, Vladareanu S, Vasiloiu R. Does inflammation influence placenta shape? A morphometric analysis regarding trophoblast and intervillous space, Gineco.eu 2015, 11(1), 24-6. DOI:10.18643/ gieu.2015.24.
- Lazaroiu AM, Popa M, Patrascu OM, Dumitru A, Mehotin CN, Sajin M, Costache M, Munteanu O, Cirstoiu M. Abnormal placental findings in the case of a pregnant woman with biliary tract hydatid disease. Gineco.eu 2015, 11(2), 62-5. DOI:10.18643/ gieu.2015.62.