Placenta increta presented as late postpartum hemorrhage in a woman without cesarean history

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INTRODUCTION:

Morbidly adherence of the placenta trophoblast to the uterine cavity is generally termed as placenta accreta spectrum. Among it, placenta increta specifically refers to invasion of trophoblast into the myometrium. When the placenta does not detach normally from the uterus after birth, devastating bleeding can occur and lead to a catastrophic result. The most common risk factors are placenta previa and previous cesarean delivery. However, placenta previa spectrum can happen after any manipulation that damages the endometrium, such as uterine curettage[1]. Herein, we report a case of placenta increta with uterine curettage history presenting as late postpartum hemorrhage.

CASE REPORT:

A 34 year-old woman (gravida6 para0) was first admitted to this hospital at 40weeks 2days of gestation because of labor pain. She had regular prenatal care at a local OBGY clinic, but did not visit this hospital during this pregnancy before labor onset. She had artificial abortion 3 times and spontaneous abortion twice and had gone through uterine curettage 4 times for that. Her Hemoglobin was 9.0g/dL upon admission. The labor course was uneventful. One healthy female baby with body weight 3068g was born. The placenta was delivered spontaneously 21minutes later. The estimated blood loss was less than 500ml. She was recovered well after delivery.

On the 35th day after delivery, she started to suffer from heavy vaginal bleeding. She visited this hospital 2days later. Ultrasound examination demonstrated that the endometrium thickness was 19mm with hetero-echoic figure and complex vascular appearance which showed rich vascular flow (PS 39.75cm/s, ED 28.33cm/s, RI 0.29) in the right uterine fundus (Fig.1). Retained product of conception was impressed. MRI was then arranged and it revealed intramuscular lesion indicating placenta increta (Fig.2). The patient was hospitalized again on the 39th day. Hemoglobin was 11.6g/dL. Trans-arterial embolization(TAE) was performed the next morning. Following that, hysteroscopic resection was done smoothly in the afternoon; placenta tissues were seen and removed (Fig. 3). The estimated blood loss during operation was 100ml. The microscopic pathologic examination noticed degenerated chorionic villi and trophoblasts, some myometrial fragments highlighted under desmin and actin stains immunohistochemically and some chorionic villi directly attached or surrounded by the myometrial tissue (Fig. 4). The whole picture is compatible with placenta increta. The patient was fully recovered after treatment.

Figure 1, ultrasound finding: complex vascular appearance.

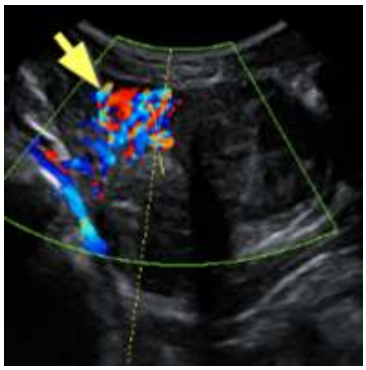


Figure 2, MRI finding: intracavitary placental lesion and disruption of the myometrial layer.

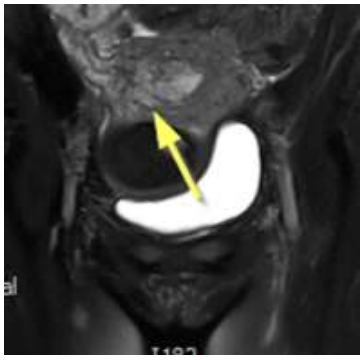


Figure 3, hysteroscopic finding: placenta tissues.

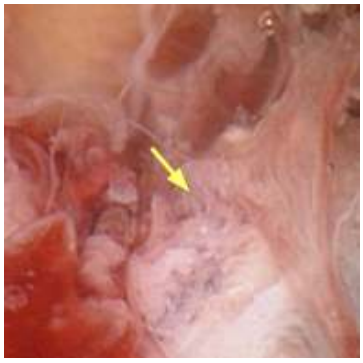


Figure 4, pathologic finding: embedded villous component in the myometrium.



CONCLUSION:

Placenta accreta spectrum is an important cause of massive intrapartum hemorrhage and the most common reason of emergency postpartum hysterectomy. It is important to detect this problem from high risk women prenatally and have a good delivery plan. Risk factors of placenta accreta spectrum include prior c-section, placenta previa, advanced maternal age, multiparity, uterine artery embolization, manual removal of placenta, or previous uterine surgery. Ultrasound and MRI are two useful tools which are equally accurate in diagnosing the presence of invasive placentation[2]. This patient was 34 year-old and had uterine curettage 4 times, but her invasive placentation problem was not detected before delivery and even did not have symptoms for more than one month after delivery. Although placenta accreta spectrum is not a common cause of late postpartum hemorrhage[3], it can potentially manifest as life-threatening uterine bleeding when it forms a mass lesion with marked vascularity like the image of this patient[4]. Therefore, it is crucial to be aware of the possibility of placenta accreta. Ultrasound can be a useful early evaluation method[5]. In addition, MRI can clearly identify intracavitary placental lesions with their disruption of the myometrial layers[4]. There is no standard management for this kind of condition. We believe our treatment (TAE + hysteroscopic resection) is reasonable to prevent massive hemorrhage and preserve the fertility ability[4,6].

References:

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