A case of huge placental lake in a pregnancy succeeding a selective uterine arterial embolization for a pseudoaneurysm of the uterus

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Placental lakes were observed in only 2.2% and are not considered a common sonographic finding in pregnant women. Some authors showed the presence of lakes was associated with adverse pregnancy outcomes. However, the adverse effects of large placenta lakes on pregnancy outcomes are uncertain. We report a case of huge placental lake in the pregnancy associated with a severe form of preeclampsia succeeding a uterine arterial embolization.

Key words: Placental lake; Pseudoaneurysm; Embolization; Preeclampsia

Case Report

A 28-year-old woman (gravida 1, para 0) was admitted due to a severe form of preeclampsia. Dilatation and curettage for a missed abortion at a local clinic had been performed on her in 2006. She was referred to our clinic for abnormal result of the Papanicolaou test and vaginal spotting. A cervical evaluation and a trans-vaginal sonography were performed, revealing a suspicious pseudoaneurysm lesion in the uterus. After selective uterine arterial embolization, the pseudoaneurysm decreased and formed the solid mass lesion in the uterine cavity. The mass was removed through curettage without hemorrhage. Then, she had a normal menstrual cycle.
The patient visited our clinic for amenorrhea on August 23, 2008. Trans-vaginal sonography revealed a normal intrauterine pregnancy. The prenatal care was uneventful, but a large placental lake was found as a sonolucent lesion in the placenta with a blood flow at the 31st gestational age. The placental lake grew to a maximal diameter of 7.6 cm with a turbulent blood flow within the lake (Fig. 2, 3). However, the uterine and umbilical artery Doppler blood flow measurements were within the normal range. Thereafter, the patient was diagnosed with a severe form of preeclampsia at 36 weeks and 5 days of gestational age and a female 2.48-kg baby was delivered through emergency cesarean delivery.

The patient had a transient uterine atony with vaginal bleeding after cesarean delivery, but this event was corrected with an administration of uterine tonics. The patient had an unremarkable postoperative course and was discharged on the fifth postoperative day. Histological examination of the placenta confirmed the diagnosis of a placental lake (Fig. 4).

Discussion

Placental lakes were observed in only 2.2% and therefore are not considered a common sonographic finding in pregnant women. Placental lakes are described as homogenous, sonolucent avillous vascular spaces with swirling jets of low-flow Doppler ultrasound. Jauniaux et al established the definition of placental lake as anechoic area (>2 cm) surrounded by placental tissue of normal echogenicity. Histologically, large lakes correspond to large avillous areas.