

A case of a pregnancy with placental implantation on uterine septum

Calis P, Karcaaltincaba D, Ozek A, Bayram M
Gazi University Faculty of Medicine, Ankara, Turkey

Objective

Congenital uterine anomalies are seen 1-3% of women, usually asymptomatic and therefore unrecognized until desire of childbearing. Uterine septum is the most frequent (35-48%) structural uterine anomaly and associated with the poorest reproductive outcome. Even if association of septum with infertility is not certain, it is well recognized that it worsens obstetric outcomes with high abortion (44%) and preterm delivery rate (22%). In the current report, we aimed to present a term pregnancy with successful outcome with placental implantation on uterine septum.

Methods

A 24 year old, nulliparous woman (G: 1 P: 0) applied to our clinic for routine first trimester pregnancy ultrasound. During the examination, it was recognized that most of the placenta was implanted on the uterine septum (Figure 1). Patient was unaware of uterine septum before the examination. She was informed about the risk of miscarriage, intrauterine growth restriction and preterm labor during the pregnancy because of septal implantation. First trimester risk for Down syndrome was 1/3375 and PAPP-A 0.64 MoM, and $\text{f}\beta$ hCG 1.74 MoM. Second trimester anatomic screening was normal except for the finding of cardiac echogenic focus. In addition to that, there was a deep uterine septum and minimum 1/3 of the placenta was implanted on the septum (Figure 2). There was no vascularity on uterine septum in doppler ultrasound. There was parental desire of amniocentesis at 18 week of gestation. The increased miscarriage risk discussed with parents due to uterine septum. The amniocentesis was performed at 18 +3 gestational week. The karyotype of the fetus was normal. The pregnancy was followed especially for growth restriction with 3 weeks apart. Until the 34 week of gestation, fetus was compatible with his gestational week. From this point up to delivery, there was only one week growth delay. Placental location was followed and from the beginning of third trimester until the birth, at least 1/3 of the placenta was located on uterine septum (Figure 3). Bilateral uterine Doppler flows were normal without any notch. Umbilical arter doppler Pulsatility Index (PI) was 1.1. Patient applied to labor unit at 37 +4 gestational week with contractions and spontaneous rupture of membranes. C-section was performed because of abnormal fetal presentation (transverse presentation). 3480 gr baby boy was born with 5th minutes Apgar score of 10. During the operation, deep uterine septum was observed (Figure 4). It divided the cavity into two and half of the placenta was located on uterine septum. The adjacent uterine cavity was empty. At post operative second day patient and the baby discharged from the hospital without any complication.

Results

Although uterine septum has poor reproductive outcome (high abortion and preterm delivery rate), in our case, in our case even if placenta was implanted mostly on the septum in the first trimester, at least a 1/3 of it in the second and third trimester, the pregnancy was ended at term (37 +4 gestational week).

Conclusion

In a retrospective study, the reason why some women with complete uterine septum have an acceptable reproductive outcome and some have recurrent miscarriages was explained with placental implantation on poor vascularized septum. This is the first case in literature showing placental implantation on uterine septum in the first trimester and reached term with successful pregnancy outcome. In conclusion, in contrast what is believed, pregnancy with placental implantation on complete uterine septum may progress successfully. When septum was diagnosed during the pregnancy, even if placental implantation is on the septum, patient should be informed that it may not cause a pregnancy complication.