

Prenatal ultrasonographic diagnosis of circumvallate placenta

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Objective

Circumvallate placenta is rarely seen and it is associated with a high incidence of perinatal complications such as preterm birth, preterm rupture of membranes and placental abruption. We present a case of circumvallate placenta diagnosed prenatally by ultrasound in a 23 year old pregnant woman.

Methods

Case presentation.

Results

This lady was referred to our perinatology unit at 33 week's gestation for vaginal bleeding and abdominal pain. There were slight vaginal bleeding and minimal uterine contractions. Ultrasonographic examination revealed a single live fetus compatible with gestational age and circumvallate placenta (Fig 1). She received two doses of dexamethasone for accelerating fetal lung maturation. Two days later she was discharged and informed about the risks. Two weeks after, she represented with premature rupture of membranes and bleeding. There was a severe abdominal pain with intense bleeding. She was delivered by emergency cesarean section due to a suspicion of placental abruption. A baby was delivered with APGAR scores of 6 and 8, weighing 2300 g at 33 weeks' gestation. The fetal surface of the placenta showed a marginal fold of the chorion and a projection of villous tissue beyond the edge of the chorion plate. The circumvallate placenta was obvious in macroscopic views (Fig 2).

Conclusion

Circumvallate placenta is a rare placental disorder occurring in approximately 1–2% of all pregnancies. In circumvallate placenta, the membranes of the chorion do not insert at the edge of the placenta but at some distance inward from the margin, toward the umbilical cord. Although some cases of prenatal sonographic diagnosis of circumvallate placenta have been reported, the ability of sonography to accurately indicate circumvallate placenta remains limited. This report shows a case of circumvallate placenta diagnosed prenatally by ultrasound. Important features included an infolding of the fetal membrane upon the fetal surface of the placenta during the middle of the second trimester.

