

Abnormally invasive placenta: a diagnosis to save lives

Rodríguez Suárez MJ, Díaz de la Noval B, Torrejón Becerra JC, Vázquez Fernández M, Sánchez López M, Navarro López M, Moreno Calvo F
Hospital Universitario Central de Asturias, Oviedo, Spain

Objective

The primary objective was to evaluate the usefulness of ultrasound scan in abnormally invasive placenta (AIP) The secondary objective was TO analyse our cases.

Methods

A search on abnormally invasive placenta was carried out in the main international literature databases and scientific platforms. We performed a retrospective cohort study including all pregnant women diagnosed with abnormally invasive placenta in our hospital between January 2016 and March 2019. Primary variables were registered: singleton/multiple pregnancy, previous uterine surgery, placental location, diagnostic test, gestational age at diagnosis, multidisciplinary team, type of delivery, gestational age at delivery, hysterectomy, transfusions, postoperative and histological study. The main variables in the newborn were: Apgar, pH, weight, percentile and complications. Maternal and neonatal follow-up was performed until hospital discharge.

Results

Seven cases of abnormally invasive placenta were recorded. All of them were singleton pregnancies with previous uterine surgery and placenta previa. Diagnosis was made by transvaginal and abdominal Doppler ultrasound. The sonographic findings of greater sensitivity were: multiple irregular vascular lacunae, loss of normal hypoechoic retroplacental zone, "bridge vessels" and retroplacental myometrial thickness of < 1mm. One of them required a hysterectomy at 17 weeks due to massive hemorrhage. In four cases the diagnosis was made during the routine second trimester ultrasound scan. Two cases were referred to our hospital at the third trimester of pregnancy: one of them for a suspected placenta accreta and the other for a suspected vasa previa. Scheduled delivery at term by cesarean section in all cases. An ultrasound scan was always performed in the operating room in order to locate the placenta before performing the hysterotomy. After fetal extraction a hysterectomy was performed. Three patients required transfusions. Newborns with normal parameters. Management by multidisciplinary teams in all cases including gynecologists, radiologists, anesthetists, hematologists, pediatricians and nurses. Surgeons and urologists also participated when the case required it. Patients with favorable postoperative course. In all these cases the histological study confirmed the existence of an abnormally invasive placenta.

Conclusion

1. Women with AIP are at high risk of life threatening hemorrhage at delivery. 2. An accurate prenatal diagnosis, based on ultrasound examination, allows to perform effective strategies to prevent maternal and fetal morbidity and mortality. 3. The most important risk factor for AIP is placenta previa and one previous cesarean delivery. Other risk factors, such as previous gynecologic procedures involving the uterus should be considered.