A case report of placenta accreta spectrum (PAS): magnetic resonance and ultrasound evaluation for the diagnosis and management

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Objective. Placenta accreta spectrum (PAS) disorders represent conditions of abnormal adherence of the placenta, which increase risk of severe hemorrhage and maternal morbidity and mortality.

We present a case of central placenta previa and vaginal bleeding during gestation in which a concomitant use of MRI and Ultrasound allowed minimization of peripartum risks through a tailored management.

A 46 year old woman gravida 2 with a previous cesarean section was referred to ultrasound evaluation at 28 and 31 weeks for vaginal bleeding. A central placenta previa with anterior development classified as PAS1 was diagnosed. The MRI was assessed at 33 weeks. It described thinning of the myometrium in the right lateral inferior site with placental bulging, so there was a concordance between the two techniques for staging the pregnancy as a PAS1, with moderate risk of bleeding during delivery. Two hospitalizations for vaginal bleeding occurred. We decided for a hysterectomy at 34 weeks.

Materials and Methods. We performed Ultrasound scan using three-dimensional Ultrasound (SAMSUNG HERA) technique and MRI.

Surgical techniques and postpartum diagnosis were made according to FIGO consensus guidelines on placenta accreta spectrum disorders.

Results. The histological findings confirmed a PAS disorder with FIGO grading 3.

Conclusions. The reported case provides a clear example of how two complementary evaluations by MRI and ultrasound can rightly stage a pregnancy at risk of PAS disorders and correctly customize the management of delivery to minimize hemorrhage in post-partum avoiding major maternal risks.