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A case of complete placenta praevia with suspected accreta following intrauterine fetal death in second trimester

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Objective

Invasive placentation is potentially a life-threatening condition. The incidence has risen 13 folds in the last 30 years. It has been directly correlated with the rising rate of caesarean delivery, IVF and uterine surgery. Optimal maternal and fetal outcomes depends on accurate prenatal diagnosis and comprehensive multidisciplinary management. There are no established protocols as how these pregnancies should be managed.

Methods

A 25 years old, G3P2+1 at 20 weeks gestation admitted with lower abdominal pain and mild vaginal bleeding. She had previous CS at 30 weeks for DCDA twins. Previous and current pregnancies were IVF. She also had a previous history of uterine septum resection twice. Initial US scan showed non-viable fetus, anhydramnios and anterior placenta previa covering the OS and suspicion of placenta accreta. MRI was performed but the diagnosis remained unclear. Medical management after uterine artery embolization was agreed by MDT. Both patient and husband were fully counselled about the management plan and the risks, She received 2 courses of misoprostol which failed. Option of cervical dilatation and uterine evacuation was agreed after further multidisciplinary discussion. This was performed uneventfully, and blood loss was 500 mls. She was discharged home on day 3 post op with FU appointment in 2 weeks.

Results

In our case provisional diagnosis was major placenta praevia with accreta. However, the clinical scenario and outcome was not suggestive of placenta accrete as uterus was emptied with no tissues were left at the end of the procedure. A false-negative diagnosis is still a possibility with MRI and cannot be used to exclude placenta accreta. Reported sensitivity and specificity has been reported the same for both USS and MRI. Before 24 weeks the placenta is immature and proliferation of vessels at the placental myometrial interface cannot be differentiated from signs of invasion. False-positive and false-negative diagnoses occur with both modalities. In cases- where the conclusions from the two tests differ, treatment planning generally errs toward anticipating the gravest diagnosis. Caesarean hysterectomy represents the most common management approach for placenta accrete, however it is often technically challenging. The invasive placenta can be left in place inside the uterus.

Conclusion

Sonography is the first-line imaging modality for placental evaluation, but MRI now plays an important role in diagnosis and allows multidisciplinary treatment planning. Careful adherence to the recommended protocol for image acquisition, interpretation and awareness of the potential diagnostic pitfalls will enable the radiologist to optimize MRI accuracy.