Prediction of morbid adherent placenta at 11-13 weeks

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Morbidly adherent placenta describes an abnormality within the adherence of the placenta to the myometrium. It is often an explanation for massive haemorrhage leading to severe morbidity and mortality. The incidence appears increased over the recent years probably thanks to the increased cesarean delivery rates. The identification of girls with risk factors is extremely important for the first diagnosis and management. Morbidly adherent placenta (MAP) occurs when the placenta fails to detach from the uterine wall because of abnormal implantation at the basal plate. This often leads to massive obstetric haemorrhage and sequelae like need for transfusion, multorgan failure, need for morbid hysterectomy and even death. Thanks to the relative rarity of the condition, few high-quality data are available regarding optimal management. Ultrasound has high affectability and particularity for the analysis of placenta accreta and MRI ought to be saved for uncommon cases during which the ultrasound is non-demonstrative. The optimum time for planned delivery for a patient with placenta accreta is around 34-35 weeks following a course of corticosteroid injection. The successful management of placenta accreta includes a multidisciplinary care team approach with the successful management relying heavily on the diagnostic technique of this entity and preparing for the surgical management during a multidisciplinary approach by assuring the foremost skilled team is out there for those patients.

The aim is to estimate the diagnostic accuracy of ultrasound in prediction of morbid adherent placenta at 11-13 weeks. This was a prospective study in women attending the primary trimester screening test for chromosomal abnormalities. Patient specific risk was designed, supported the history of previous uterine surgery and placenta position. On the idea of those risks, the population was stratified into high-and-low risk groups for Morbid Adherent Placenta (MAP). High risk group was followed up during a special designed MAP clinic at 11-13, 20-24 and 28-34 weeks. The ultrasound markers utilized in this study were: Non-visible CS scar, irregularity of the uterine-bladder interface, retro-placental myometrial thickness, presence of intra-placental lacunar spaces, presence of retro-placental arterial/trophoblastic blood flow and 3D power Doppler irregular placental vascularization. The diagnosed was made on three or quite three ultrasound markers. The study population of twenty-two, 604 pregnancies at 11-13 weeks was assessed. 1,130, were exclude, due to no pregnancy outcome at the top, or because the pregnancy ended with termination or a miscarriage. The remainder 21,474 were assessed at 11-13 weeks for previous uterine surgery and low-lying placenta. We exclude 20,176 and 1,298 were assessed as high-risk patients and people patients were mentioned the MAP clinic at 11-13 weeks. 42 patients didn’t attend the primary appointment and 243 were excluded, because the placenta was high. From the remainder 1,013 patients, 14 patients were diagnosed with MAP and 999 patients with no MAP. All of the patients were followed at 20-24, 28-34 weeks and at the time of the delivery. 13 patients were correctly diagnosed with MAP, there was one false positive and 34 patients correctly diagnosed with pregnancy. This study shows the feasibility of trimester prediction of MAP, by employing a combination of patient’s history of a previous uterine surgery, placenta position and specific ultrasound markers.