

Placenta Accrete Spectrum : Modern Obstetrics Nightmare

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There is an emerging condition in modern obstetrics nowadays due to increase cases of placenta accrete spectrum (PAS). The condition has become an obstetrician major problem due to high maternal morbidity and mortality.¹⁻⁴ The increasing is about four-fold from 0.08% to 0.3% over the past decades.^{1,2,5} Thus, it is associated with complications such as massive bleeding, organ damage, blood transfusion, intensive care unit admission, and maternal/perinatal mortality.^{1,5}

The natural risk of placenta accrete spectrum remain unclear. Previous uterine surgery, specially caesarean delivery directly linked to increase PAS incidence.^{3,5,6} There was significant increasing in caesarean delivery within 2 decades, from less than 7% in 1990's to approximately 15% in 2010's, which above WHO recommendation for caesarean delivery.⁶

There has been changes in PAS perspective nowadays. The perspective changes from abnormal invasive of villi that invading to myometrium or until serosa layer, to decidual maldevelopment, when there is direct contact between chorionic villi towards myometrium with an absence of decidua. It is known associated with previous operative procedure such as in previous caesarean section, myomectomy or in uterine curettages. Thus, a proposed hypothesized that an accrete placenta occurred due to a maldevelopment of decidua, excessive trophoblastic invasion or a combination of both.² Additionally, the expression of growth, angiogenesis and invasion-related factors in trophoblast are the main factors causing accrete placenta.⁷

An early and accurate diagnosis of PAS is important during surgery preparation. An ultrasound at 11-14 weeks in highly recommended to be performed, especially when there is history of previous caesarean section, since the classical ultrasound signs of PAS appears in most of the affected women.⁵ Ultrasound examination in first trimester highly recommended to be performed in looking for Caesarean Scar Pregnancy (CSP) feature.^{1,5,6} An occurrence of CSP known as an early precursor of PAS.⁸⁻¹⁰ Another important thing is a confirmation of gestational week also helps the surgeon to decide time to deliver the baby. Therefore, antenatal diagnosis and preoperative preparation with multidisciplinary team approach are major consideration in reducing maternal and perinatal morbidity and mortality.^{5,6}

The principal management strategy in managing PAS is to prevent morbidity and mortality, including to prevent excessive bleeding and to minimize surgical complication, such as organ damage, requirement for blood transfusion and also intensive care unit admission.^{1,3,5,6,11} This can be achieved through an early and accurate diagnosis, definitive or conservative surgical methods and multidisciplinary team approach.

An accrete placenta spectrum has changed from a rare pathological condition to a serious obstetrical problems and there has not been best treatment option. There are some "notes" as our homework to be considered in accrete placenta management, such as : Well trained on awareness and an early detection on diagnosing an accrete placenta; A referral system on detecting and managing of accrete placenta need to be established, especially in remote are; An establish funding system; A guideline or professional recommendations; yet, a further research is still needed, especially how to prevent an occurrence of an accrete placenta.

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