

## Editorial

# Strategy for those pregnant women with placenta accreta who plan delivery

The management of pregnant women with placenta accreta remains challenging [1] and requires the close cooperation of a specialized team, including anesthesiologists, obstetricians, interventional radiologists, blood bank providers, and intensive care teams. Thorough planning can decrease blood loss and the need for various blood products, with a resultant decrease in perioperative morbidity and mortality. Transient or permanent occlusion of uterine feeding vessels, either the iliac vessel or uterine vessels or other circulating vessels, has long been used in the management of placenta accreta [2], not only for uterine preservation, but also for uterine sacrifice [3–5]. Uterine sacrifice includes cesarean hysterectomy and peripartum hysterectomy.

Obstetricians are familiar with the procedures of their field, including strategies to decrease blood loss with and without a radiologist's help, and surgical techniques including how to preserve and remove the uterus. Strategies to decrease blood loss include medical treatment (such as oxytocin and pitressin) [6], physical compression (such as rolling gauzes), balloon tamponade [7], permanent occlusion or ligation of the internal iliac artery or uterine artery through ligation [8,9] or embolization [5], or transient occlusion of the internal iliac artery or uterine artery or their circulating vessels [10], through either tourniquet or balloon.

The study by Lan et al [11] discussed whether the different anesthesia management strategies had an effect on the Apgar score. The article provided useful information, shared the experiences and views of anesthesiologists, and is worthy of our attention. For example, the average gestational age for cesarean hysterectomy was 34.2 weeks, which was the same as that suggested in another report [12]. Although there are a handful of articles available in the literature addressing this topic [12,13], obstetricians seldom take into account the views of anesthesiologists. Recent reviews have focused on an update on the state-of-the art multidisciplinary management of parturients undergoing cesarean hysterectomy because this multidisciplinary approach results in the best outcomes [12,13].

First, conservative managements of hemorrhage through the use of uterotonics, fluid resuscitation, blood transfusion, and surgical hemostatic agents or the more aggressive strategies, for example, the use of uterine and placental preservation and subsequent methotrexate therapy or pelvic artery embolization, or iliac artery ligation, can be life-saving for these patients.

Second, Lan et al [11] suggested that anesthesia may be a better alternative in the induction-to-delivery period, especially for women with placenta accreta/percreta and in situations in which poor neonatal outcome is expected [11]; this concept was also supported by Canadian physicians [12]. The decision to administer regional anesthesia should be individualized and made only after a thorough and complete review of the pertinent history, physical examination, and appropriate laboratory and imaging data [12]. Patients with cesarean hysterectomy have undergone regional anesthesia initially, but many of them ultimately required intraoperative conversion to general anesthesia because of difficulty in the manipulation during the procedure and patient discomfort and intolerance of pain [13]. In the article by Lan et al [11], up to 60% of patients (4 of 7 patients) were finally switched from regional anesthesia to general anesthesia [11]. This seemed to support the concept that, as predicted, it is difficult to perform cesarean hysterectomy with regional anesthesia.

In conclusion, abnormal placentation of a pregnant woman is still highly risky in terms of morbidity and mortality. Thorough planning to include a well-coordinated special team, specifically obstetricians for accurate preoperative diagnosis, anesthesiologists for surgical assistance, obstetricians or gynecologic oncologists for difficult surgical techniques, interventional radiologists before or after surgical intervention, blood bank providers to support any heavy blood loss, and intensive care physicians for postoperative care, might decrease morbidity and minimize the mortality rate.

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