A NOVEL SURGICAL APPROACH TO THE MANAGEMENT OF PLACENTA PERCRETA,

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ABSTRACT

Objective: Placenta percreta is associated with significant maternal morbidity and mortality. A major contributing factor is maternal hemorrhage requiring massive transfusion of blood products. In some series the maternal mortality rate has been reported to be as high as 7%. Management involves complex planning by a multidisciplinary team. This case series reviews maternal outcomes of five women with known placenta percreta delivered using a modified surgical technique to minimize blood loss at the time of uterine entry.

Study Design: We reviewed the outcomes of women with confirmed diagnosis of placenta percreta who had cesarean delivery performed with a plan for delayed hysterectomy at six weeks postpartum. This study involved all deliveries performed at Vanderbilt University Medical Center using this novel surgical technique between May 2012 and May 2014. Using ultrasound guidance to avoid the placenta, two stay sutures of 0 chromic were placed through the entire thickness of the uterus and membranes for traction. Initial uterine entry was accomplished using cautery to dissect carefully through uterine myometrium muscle fibers. Alice-Adair clamps to expose the intact amniotic membrane and the Covidien CS-57 auto-stapling device loaded with absorbable polyglycolic acid staples. After delivery of the fetus, the uterus was closed in layers with the placenta left in situ.

Material: This study involved all deliveries performed at Vanderbilt University Medical Center using this novel surgical technique between May 2012 and May 2014. Using ultrasound guidance to avoid the placenta, two stay sutures of 0 chromic were placed through the entire thickness of the uterus and membranes for traction. Initial uterine entry was accomplished using cautery to dissect carefully through uterine myometrium muscle fibers. Alice-Adair clamps to expose the intact amniotic membrane and the Covidien CS-57 auto-stapling device loaded with absorbable polyglycolic acid staples. After delivery of the fetus, the uterus was closed in layers with the placenta left in situ.

RESULTS

Deliveries consisted of four singleton and one dichorionic diamniotic twin pregnancy.
- The number of previous cesarean deliveries varied from 2-5.
- All deliveries were completed successfully and hysterectomy was scheduled at six weeks postpartum.
- No patient received blood transfusion at the time of delivery. All deliveries were planned delayed hysterectomy performed with a plan for delayed hysterectomy at six weeks postpartum.
- No patient had preservation of the bladder.
- One immunocompromised patient with a diagnosis of infection required hysterectomy at 4 weeks postpartum, experienced blood loss of 1000 mls, required 2 units of packed red cells intraoperatively. All patients were followed weekly as outpatients by Maternal Fetal Medicine specialists until the time of scheduled cesarean delivery.
- No maternal deaths occurred.

CONCLUSIONS

These early results suggest that a novel surgical technique for uterine entry at the time of cesarean delivery along with planned delayed hysterectomy is effective in reducing the risk of severe hemorrhage, massive transfusion and associated maternal complications.