Abstract # 259

Anesthetic Management of the Massive Obstetric Hemorrhage: Is it a Time for New Transfusion Guidelines?

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Introduction: Current transfusion practices vary widely among OBGYN departments. Conventional massive obstetric hemorrhage protocols may underestimate the optimal plasma and platelet to RBC ratios.

Case: A 44-year-old female G1P0 was admitted to the department at 39 weeks of gestation for a primary C-section due to previous myomectomy. The anesthesia team used CSE anesthesia for the C-section. After lower abdominal incision/lower uterine segment incision, a baby was delivered with APGARS of 9/9. The patient was transferred to the recovery room with a blood loss of 1200 ml. After temporal stabilization, the patient was getting progressively hypotensive, with increased bleeding from the wound, vagina and peripheral intravenous catheters. The patient was taken to the operating room for exploratory laparatomy in an attempt to control the bleeding. During the procedure, the surgeons complained of a complete lack of coagulation. A massive transfusion was started in an attempt to be as close as possible to the 1:1 plasma to RBC ratio. Over 7 hours of the surgery the patient was transfused with 10 U PRBC and 8 U FFP. Additional 4 U of FFP were given in the immediate post-operative period. The changes in INR values with bleeding and FFP transfusions are shown at the Graph 1. The patient was also was transfused twice with 1 U of platelets during the surgery. The total estimated blood loss was 8000 ml, and the patient also received 11000 ml of crystalloid and 1500 ml of colloid during surgery. The bleeding was finally controlled by total abdominal hysterectomy. The patient remained intubated and was transferred to intensive care unit for further care. The patient was extubated on post-operative day 1 and discharged home on post-operative day 8.

Discussion: Our patient's coagulopathy significantly improved with massive plasma transfusion (INR ratio changed from infinity to 1.6, about 11.5 hours after we started plasma transfusion). Earlier plasma transfusions would probably have decreased or prevented consumption coagulopathy in our patient. Based on this experience and data from a literature, a joint meeting between the anesthesia and OBGYN departments was held and new transfusion protocols were discussed. We will need more studies in the future to determine the optimal transfusion guidelines for massive obstetric hemorrhage. Transfusion of the whole blood should be evaluated when it becomes available in the USA.