ACUTE BLOOD LOSS: DEVELOPMENT OF A MASSIVE TRANSFUSION PROTOCOL

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Background/Significance: Severe intra-post-partum hemorrhage is an uncommon occurrence however when it occurs, proper management for the mother and baby by labor & delivery (L&D) and post-partum staff is crucial. In a retrospective analysis of cases with hemorrhage a variation in blood product usage and laboratory draws was identified. Based on these findings, further analysis of individuals who experienced acute blood loss during a hospitalization was conducted. The findings from this review demonstrated the need to educate providers on blood product usage, improve communication among (all?) staff, and determine appropriate allocation of blood products. The next step in this process was the development of a multidisciplinary team representing ICU, ER, OR, IR, L&D and blood bank to develop a Massive Transfusion Protocol (MTP) that is utilized not only by L&D but throughout the hospital.

Design/Education: The team reviewed research and best practices and developed a sequence of blood products and lab draws that would be appropriate for the institution. Before further work was completed the sequence of blood products and laboratory draws were reviewed and approved by the physician team that included representatives from anesthesia, obstetrics, and the Chief Medical Officer. The next step was to identify roles and responsibilities of the care team. The MTP team referred to the code blue and rapid response policy in order to make certain that roles and responsibilities are similarly assigned in order to help develop a parallel process to be less confusing for team participants. A packet of materials that contained the order set, flow sheet, guideline, algorithms, role definitions, and evaluation sheet was designed and meant to be placed on all crash carts for easy access. A video of MTP was created and presented at staff meetings and a learning link module was created to evaluate the impact of the education.

Outcomes: After the first MTP, the initial evaluation demonstrated that even the most well developed protocol can be improved. A positive element from the first MTP was that communication between the blood bank and clinical team improved. There were fewer phone calls to the blood bank which allowed them to conduct their responsibilities uninterrupted while staff was aware of product availability. Areas for improvement included crowd control in the patient room and clearer identification of staff roles during the occurrence.

Conclusion: Development of the massive transfusion protocol to standardize the order and administration of blood products, lab draws and identifying roles and responsibilities of the team has had a positive impact on physicians, nursing, and blood bank technicians. The protocol itself serves as a tool to define team member actions that need to occur in this often chaotic situation, and provides standardized blood product and laboratory support.