Transfusion-Alternative Strategies in a Jehovah's Witness with Placenta Acreta and Severe Preeclampsia

Abstract Type: Case Report/Case Series
Marcos Silva, M.D.; Stephen Halpern, F.R.C.P.C.; Clarita Bandeira Margarido, M.D., Ph.D.; Amy Swinson, M.R.C.P., FRCA
University of Toronto

Introduction: Obstetric hemorrhage is a leading cause of maternal mortality. While blood replacement therapy can be lifesaving, this modality is not available for parturients who are Jehovah’s Witnesses (JW). This case report describes a patient at high risk for obstetric hemorrhage and the therapeutic strategies, consistent with JW religious convictions.

Case Report: A 40-year-old, 130-kg, 170-cm G2, P1, JW was admitted 25.5 weeks gestation, with severe preeclampsia, complete central placenta previa, and possible placenta accreta. She had a history of chronic hypertension, asthma, fibroid embolization, and previous postpartum hemorrhage. 5 days prior to admission, her blood pressure increased, she had proteinuria and headaches, treated with increasing doses of labetalol and nifedipine. On admission to hospital, a multidisciplinary team was assembled to discuss her medical and obstetrical management. The next day, her condition deteriorated and delivery by cesarean section was planned. On physical examination, her BP was 175/95 and her HR was 80. We anticipated difficulty in airway management. Her laboratory Results included a Hb of 129 g/l and platelet count of 219,000/mm3. Other coagulation parameters were normal. Preoperative management consisted of treatment with IV magnesium, insertion of a balloon-assisted occlusion devices in both iliac arteries, priming the cell saver with synthetic colloid and placement of a #7.5 FR introducer sheath in the right IJ for preoperative acute hemodilution ( 2 units of blood replaced with 500 ml colloid and 1500ml RL) and transfusion through a rapid infuser blood warmer. We used standard monitoring + an arterial/CVP line. We chose general anesthesia because of anticipated complicated surgery. Preparation for airway management included a 150 head-up tilt, and the availability of adjuvant airway equipment. After a rapid sequence induction and cricoid pressure, the patient was induced with propofol and succinylcholine and intubated using a Glidescope®. Anesthesia was maintained with sevoflurane, N2O & O2. Uterine bleeding was rapidly controlled after delivery and the patient was autotransfused over the next 45 minutes. The surgery was prolonged because of technical problems related to obesity. The Hb was 100 g/l the day after surgery and the patient was discharged on day 6.

Discussion: While blood transfusion cannot be used in JW patients, other options are available. A multidisciplinary team is helpful expedite the use of the most appropriate blood-sparing modalities.

Reference: