

Management of a Jehovah's Witness parturient at high risk for postpartum hemorrhage

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- **Background:**

- Jehovah's Witness parturients have a constitutional right to decline allogeneic blood transfusion consistent with her religious beliefs¹
- Traditionally, Jehovah's Witnesses do not accept primary blood components even in life-threatening circumstances
- Personal thresholds may vary → some may accept blood component fractions, albumin, or intraoperative cell salvage (ICS)
- Unique challenge for the anesthesiologist during the peripartum period due to the potential for acute, large volume blood loss

1. Mason CL, Tran CK. Caring for the Jehovah's Witness Parturient. *Anesth Analg*. 2015;121(6):1564-69.

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• Patient:

- 31-year-old G1P0 Jehovah's Witness with a history of a 5x6cm lower uterine fibroid
- Admitted at 38w4d for IOL in the setting of pre-eclampsia with severe features
- OB team felt vaginal delivery was in the patient's best interest given the potentially morbid nature of cesarean delivery from her bleeding risk and large fibroid.
- Decision made to proceed with cesarean delivery given no cervical change after 17 hours
- High risk for PPH: prolonged oxytocin use (>30 hours), therapeutic magnesium sulfate, potential need for classical uterine incision due to the fibroid location
- Patient would accept ICS therapy
- Declined use of all fractionated blood products, clotting factors, and albumin

Case:

- Multi-disciplinary plan was made:
 - ICS, prophylactic tranexamic acid immediately after delivery
 - OB team to make uterine incision with Debakey vascular clamps for hemostatic control
- Uncomplicated combined-spinal epidural with hyperbaric bupivacaine, fentanyl and morphine sulfate
- Obstetric and Fetal Therapy teams performed a midline vertical skin incision
 - ultrasound-guided classical hysterotomy utilizing vascular clamps along the hysterotomy edges
- Tranexamic acid given immediately after cord clamping
- Uterine atony treated with oxytocin infusion, misoprostol and carboprost
- Quantitative blood loss was 1L, received 800mL crystalloid
- Insufficient cell salvage collected to return to the patient
- Pre-operative hemoglobin was 13.0 g/dL → 10.1 g/dL on post-operative day 1
- Successfully discharged home on postpartum day 6

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• Learning Points:

- Caring for the Jehovah's Witness parturient, particularly one with major risk factors for PPH, requires knowledge and utilization of resources from both the anesthesiology and obstetric teams to prevent and manage blood loss
- Multidisciplinary communication and advanced planning were key to a satisfactory outcome in this patient
- Risk factors for a poor outcome were recognized early and appropriate plans developed
- Prior experience in fetal surgery cases lead to recommendation for additional surgical techniques to help control bleeding for this high-risk patient
- Patient's preferences regarding blood products, ICS, albumin should be determined and confirmed throughout course, especially if major changes occur