Postpartum Hemorrhage in a Jehovah’s Witness

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CONFLICT OF INTEREST DISCLOSURE STATEMENT

• I have no significant financial interest with any commercial or corporate enterprise.

• I shall not discuss any off-label usage of any FDA-approved medications or other products.

Case presentation

• 40 year old G1P0 at 40 weeks presents for IOL
  — Jehovah’s witness
  • Signed form refusing all human blood products
  • Identified mother as health care proxy
  • Initial hemoglobin/hematocrit: 13.8/40%
  — Multiple fibroids
  • Largest 8cm posterior, intramural
  — Mild cardiomyopathy
  • SOB on exertion, ejection fraction 45%, EKG normal
  • Low dose beta blocker
  • Intra-partum considerations: avoid fluid overload
Have you taken care of a Jehovah's witness who accepted a blood transfusion because of a life-threatening hemorrhage?

A. Yes
B. No

Have you taken care of a Jehovah's witness who died because they would not accept blood?

A. Yes
B. No

How much higher is maternal mortality in Jehovah's Witnesses compared to the general population?

A. 5 times higher
B. 20 times higher
C. >40 times higher
Transfusion in a Jehovah's Witness

- Studies on Jehovah's Witness acceptance of blood
  - 10-12% of Jehovah's Witnesses would accept blood
  - 10% of JW would agree to a blood transfusion for their child
  - Over 50% would accept blood fractions

- Substantially increased risk of death
  - 44-fold increase in maternal mortality
  - 130-fold increase in mortality due to hemorrhage

Gyamfi C, Berkowitz R. Responses by pregnant Jehovah's Witnesses on Health Care Proxies

Singa A, Lapinski R, Berkowitz R, Saphier C. Are women who are Jehovah's Witnesses at risk of maternal death?


Background

Blood Product Consent

- Packed red blood cells
- Fresh frozen plasma
- Cryoprecipitate
- Albumin
- Isolated factor preparations
- Plasma expanders (e.g. saline, Ringer's solution, hetastarch, dextran)
- Hemodilution
- Cell Saver
Case presentation

- Counseling prior to induction of labor
  - Increased risk of PPH due to fibroids and induction of labor
  - Increased risk of adverse cardiac events with refusal of blood products in the setting of cardiomyopathy
  - The patient stated clearly that she would rather die than accept blood products

Labor Course

- 18 hour induction of labor
  - No oxytocin required
  - First dose of Misoprostol 02:15
  - Exam closed/fng/posterior
  - Contracting regularly with no oxytocin
  - Amniotomy 18:30
  - Clear fluid
  - Exam 4-5/80/-1

  - Recurrent variable decelerations. Fully dilated x2 20:00
  - V/WD 20:08
  - 3100g male infant

  - Two more doses of misoprostol 06:30, 10:40
  - Painfully contracting Epidural placed 13:30
  - Intracervical foley 14:50
  - Exam 1-2/50/-3

  - Tachysystole, prolonged deceleration 19:50
  - Terbutaline 0.25mg sc x1
  - Exam 8/90/0

  - Fully dilated/+2 20:00

  - VAVD 20:08

  - 3300g male infant

Postpartum Hemorrhage

- Placenta delivered spontaneously intact
- Heavy bleeding and uterine atony noted
- Uterotonics administered
  - Oxytocin IV
  - Methergine 0.2mg IM x 1
  - Misoprostol 1000mcg PR x 1
- Second IV line placed, crystalloid boluses given
- Bakri balloon placed
- Tachycardia 120-130 Hypotensive to 80/40s, phenylephrine and ephedrine given, oxygen sat normal.
- Taken to OR for hysterectomy 30 min after delivery
Postpartum Hemorrhage

- General anesthesia in OR
- Ex-lap for hysterectomy
- Intraoperative lab values:
  - Hemoglobin 4.4
  - PT 27, PTT 85, INR 2.6
  - Platelets 30
- Health care proxy (mother) was contacted and informed that the patient would die without blood transfusion
- Mother agreed to transfusion

Postpartum Course

- 4 units pRBCs, 3 units FFP, 6pk platelets were transfused
- Hysterectomy was completed
- The patient was transferred to the surgical ICU
- Received 2 units pRBCs per day for the next three days
- Was discharged to home on postop day 7
- Both mother and infant were doing well at follow up

General Teaching points

- Antepartum counseling
- Anesthesia consult as an outpatient
- Uterotonics in the room at delivery
- Active volume resuscitation (crystalloid/albumin/cell saver)
- Lower threshold for hysterectomy
Specific Lessons Learned

- Ask the patient’s health care proxy to be in the hospital and readily reachable at the time of delivery.
- Inform the patient antepartum that their proxy has the authority to overturn their decision about blood products if the patient is unable to respond.
- Protect the patient’s privacy.
  - Do not disclose information about blood transfusion to family.
  - Ensure that no one inadvertently witnesses transfusion.
- This patient ultimately expressed gratitude for the life-saving transfusion.

Legal Implications

- Wrongful death
  - The patient and health care proxy refused blood but rest of the family requested a transfusion.
    - Court ruled for plaintiff, $1,000,000 wrongful death.
- Wrongful life
  - Patient was transfused despite having a “blood card” (no date, not witnessed).
    - Court ruled for plaintiff, transfusion was considered battery, awarded damages of $20,000.
- Other issues
  - Delay in definitive Therapy.
  - Deviation in standard of OB care potentially leading to excessive blood loss.

What proportion of women who have PPH have identifiable risk factors prior to delivery?

A. The majority
B. Half
C. Fewer than half
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