

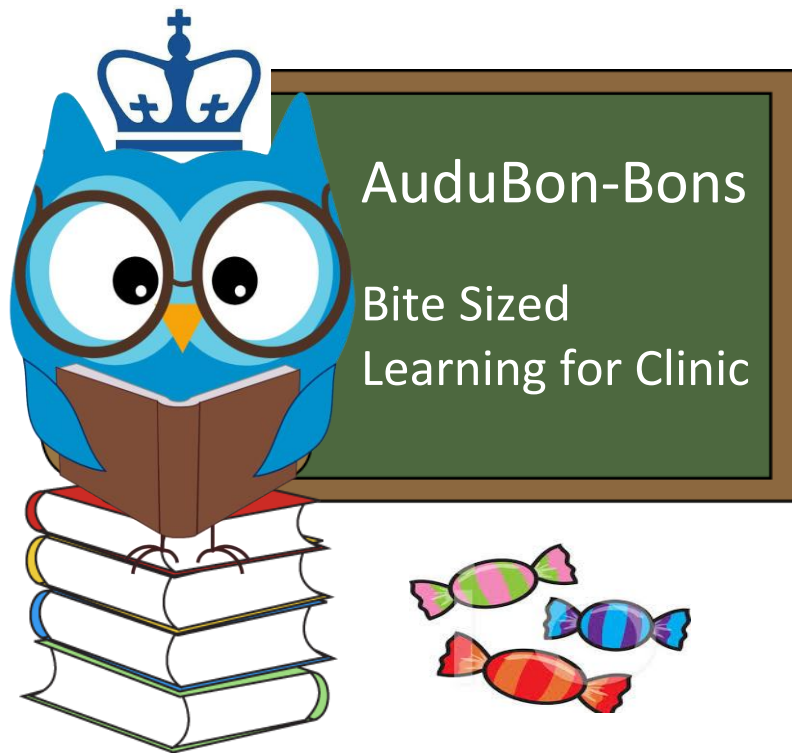
Prenatal Care: Refusal of Blood Products

Week 47

Prepared by Henry James Behar, MD

Reading Assignment:

- Gyamfi, Cynthia, and Richard L. Berkowitz. "Management of pregnancy in a Jehovah's Witness." *Obstetrics and gynecology clinics of North America* 34.3 (2007): 357-365.
- Gyamfi, Cynthia, Mavis M. Gyamfi, and Richard L. Berkowitz. "Ethical and medicolegal considerations in the obstetric care of a Jehovah's Witness." *Obstetrics & Gynecology* 102.1 (2003): 173-180.



LEARNING OBJECTIVES



- Discuss the risks associated with refusal of blood products
- Determine how best to counsel a patient who refuses blood products
- Identify specific recommendations for her antepartum management



CASE VIGNETTE

- Ms. Nunca Sangre is a 34 year old G4P2103 @ 11w3d EGA presenting for a new Ob visit.
- She denies any complaints today; denies vaginal bleeding or pelvic pain.
- You notice that she has a copy of The Watchtower magazine with her, so you ask if she is a Jehovah's Witness.
- She is.



JEHOVAH'S WITNESSES

- Branch of Christianity founded by Charles Russell in Pennsylvania in 1872
- Approximately 7 million followers worldwide
 - Jehovah's Witnesses represent approximately 0.4% of the US population
- Adherents generally refuse blood products due to the literal interpretation of several verses in the Bible
 - *“Only, you shall not eat flesh with its life, that is, its blood.”* [Genesis 9:4](#)
 - *“If any man . . . eats any sort of blood, I will certainly set my face against the one who is eating the blood, and I will cut him off from among his people. For the life of the flesh is in the blood.”*— [Leviticus 17:10, 11](#)
- Some patients who are Jehovah's Witnesses may accept some, or rarely all, blood products or derivatives.



SCREENING AND COUNSELING

How do you determine if your patient accepts or refuses blood products?

ASK

- Pregnant Jehovah's Witnesses are usually encouraged to make their position on blood transfusion known early in pregnancy
- Every new obstetric patient should be asked whether they accept blood products at their initial visit and their response should be documented.
- If they report that they do not accept blood products, determine if that includes all or some blood products.



SCREENING AND COUNSELING



COLUMBIA

COLUMBIA UNIVERSITY
IRVING MEDICAL CENTER

SLOANE HOSPITAL FOR WOMEN
DEPARTMENT OF OBSTETRICS AND NURSING
PERINATAL PRACTICE GUIDELINES

Check List for Blood Products/Techniques for Jehovah's Witness Patients

I hereby consent to receive the blood products and techniques marked below:

- Blood
- Fresh Frozen Plasma
- Cryoprecipitate
- Albumin
- Isolated Factor Preparations

- Non Blood Plasma Expanders
- Hemodilution
- Cell Saver

- None of the Above

Patient's Name (Please Print)

Patient's Signature

Witness

Date



SCREENING AND COUNSELING

How do you counsel your patient regarding the risks of refusing blood products?

- Obstetric hemorrhage is the second leading cause of maternal mortality in the United States
- Studies have shown that pregnant patients who refuse all blood products have as great as a 130-fold greater risk of maternal morbidity and 3.1-fold increase in serious morbidity associated with hemorrhage
- It is estimated that approximately 1000 Jehovah's Witnesses die annually due to refusal of blood products



SCREENING AND COUNSELING

Table 3 Comparison of studies reporting morbidity and mortality rate in Jehovah's Witness patients

	<i>Singla et al.</i> ¹⁴	<i>Massiah et al.</i> ¹⁵	<i>Van Wolfswinkel et al.</i> ¹⁶
No. of deliveries	391	116	8850 (estimated)
% Cesarean section	16%	24%	Not given
No deaths	2	1	6 (3 substandard care)
% PPH	6%	6%	Not given
Increased risk of maternal death	44 fold	65 fold	130 fold

Arulkumaran, Karoshi, Keith, Lalonde, B-Lynch (2012) *A Comprehensive Textbook of Postpartum Hemorrhage 2nd Edition: An essential clinical reference for Effective Management* London, UK: Sapiens Publishing Ltd



SCREENING AND COUNSELING

What specific antenatal testing do you offer your patient who refuses blood products?

- Assess for **anemia**
 - CBC to monitor hemoglobin/hematocrit monthly
 - Attempt to maintain a hemoglobin/hematocrit above 12g/dL / 40%
- Assess for **abnormal placentation if obstetrically indicated**
 - Significantly higher risks for morbidity and mortality is associated with placenta accreta



SCREENING AND COUNSELING

How do you manage anemia in your patient who refuses blood products?

- Lab assessment for specific types of anemia
 - MCV, MCH, MCHC, reticulocyte count, TIBC, transferrin, ferritin, vitamin B12, folate
- Supplement deficiencies
 - Consider parenteral administration
 - A single infusion of IV iron can provide 1000 mg of elemental iron compared to 25mg/day of elemental iron via the GI tract
- Erythropoietin can increase hemoglobin ~1.44g/dL



SCREENING AND COUNSELING

How do you plan in advance for intrapartum management of your patient who refuses blood products?

- Antepartum consultation with:
 - MFM
 - Anesthesiology
 - Hematology
- Discuss and prepare alternatives to blood products:
 - Intraoperative blood salvage
 - Antifibrinolytics
 - Recombinant factor VIIa
- End of life decisions:
 - Health care proxy
 - Assigning guardian for unborn child(ren)



MEDICAL ETHICS

What principles of medical ethics are important to consider when counseling a patient who refuses blood products?

- **Autonomy**

- The right of competent adults to make informed decisions about their own medical care.

- **Beneficence**

- The principle of acting in the best interest of the patient.

- **Nonmaleficence**

- *Primum non nocere*
- “First, do no harm.”



SOCIAL DETERMINANTS OF HEALTH

Black women are at higher risk of severe morbidity and mortality associated with PPH.

- Study by Gyamfi, et al. looked at risks of morbidity from 2012-2014 among 360,000 women with PPH
- Risk for severe morbidity was significantly higher among non-Hispanic black women (26.6%) than non-Hispanic white, Hispanic, or Asian or Pacific Islander women (20.7%, 22.5%, 21.4%)

Risk of death for non-Hispanic black women is significantly higher than for non-black women (121.8 per 100,000 deliveries vs 24.1 per 100,000 deliveries)



EPIC .PHRASE

.BBonbldproductcounseling

Description: Plan for Obstetric Patients Not Accepting Blood

The patient was briefly counseled about the increased risks for severe morbidity and mortality seen with refusal of blood products during pregnancy. Need for a health care proxy was discussed, and delivery location was recommend for CHONY. Aggressive treatment of anemia in pregnancy was recommended. The patient was informed they would be referred to Perinatal for a more detailed consult.



CODING AND BILLING

- **ICD-10: Z53.1** - Procedure and treatment not carried out because of patient's decision for reasons of belief and group pressure and treatment not carried out because of patient's decision for reasons of belief and group pressure



EVIDENCE

- Zeybek, B., Childress, A. M., Kilic, G. S., Phelps, J. Y., Pacheco, L. D., Carter, M. A., & Borahay, M. A. (2016). Management of the Jehovah's Witness in Obstetrics and Gynecology: A Comprehensive Medical, Ethical, and Legal Approach. *Obstetrical & gynecological survey*, 71(8), 488–500. doi:10.1097/OGX.0000000000000343
- Arulkumaran, Karoshi, Keith, Lalonde, B-Lynch (2012) *A Comprehensive Textbook of Postpartum Hemorrhage 2nd Edition: An essential clinical reference for Effective Management* London, UK: Sapiens Publishing Ltd
- Gyamfi, Cynthia, and Richard L. Berkowitz. "Management of pregnancy in a Jehovah's Witness." *Obstetrics and gynecology clinics of North America* 34.3 (2007): 357-365.
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- American College of Obstetricians and Gynecologists ACOG Practice Bulletin: Clinical Management Guidelines for Obstetrician-Gynecologists Number 76, October 2006: postpartum hemorrhage. *Obstet Gynecol.* 2006;108:1039–1047
- Massiah N, Athimulam S, Loo C, Okolo S, Yoong W. Obstetric care of Jehovah's Witnesses: a 14-year observational study. *Arch Gynecol Obstet.* 2007;276(4):339-343.
- Gyamfi C, et al. Postpartum hemorrhage outcomes and race. *Am J Obstet Gynecol.* 2018 Aug;219(2):185

