PLANNING FOR WOMEN (JEHOVAH'S WITNESSES AND OTHERS) WHO MAY DECLINE BLOOD AND BLOOD PRODUCTS

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EXECUTIVE SUMMARY

- It is important to assess a woman's stance toward blood products well in advance of labor or planned surgery.
- After personal discussion, approximately half of the Jehovah's Witness community may be willing to accept some blood products such as Fresh Frozen Plasma, Erythropoietin, Cell-Saver re-infusion, and even some will accept red cells in the face of death.
- Prenatal optimization of hemoglobin and developing a detailed management plan for delivery are critical steps for women who may decline transfusion of some or all blood products.

BACKGROUND AND LITERATURE REVIEW

Given the known rate of obstetric hemorrhage, it is very unsettling to many obstetricians and anesthesiologists to have a patient decline a potentially life-saving treatment. Fortunately, discussions regarding limits to intervention generally occur in advance of emergencies in pregnant women whose belief systems preclude blood transfusion.

The goals of the interaction with the woman who is declining transfusion are the following: 1) to find common ground to manage the birth as safely as possible; 2) to build trust or if not possible, to transfer to a program amenable with the plans; and 3) to develop a well thought out delivery plan to minimize blood loss and maximize decisive decisions. A large study in New York of 391 live births among Jehovah's Witnesses found 2 maternal deaths from hemorrhage (512 maternal deaths per 100,000 births).[1]

With regard to goal #3 listed above, there is a broad movement in the United States to develop skills and promote the concepts of "Bloodless Surgery." While this may sound a bit utopian, there are case series of open-heart surgeries and liver transplants without transfusions. The principles of this approach are listed below:[2]

General Principles of Bloodless Medicine Management

- Employ a multidisciplinary treatment approach to blood conservation
- Formulate a plan of care for avoiding/controlling blood loss
- Consult promptly with senior specialist experienced in blood conservation

- Promptly investigate and treat anemia
- Decisive intervention, including surgery
- Be prepared to modify routine practice when appropriate
- Restrict blood drawing for laboratory tests
- Decrease or avoid the use of anticoagulants and antiplatelet agents
- Stimulate erythropoiesis
- Transfer a stabilized patient, if necessary, to a major center before the patient's condition deteriorates

Not all blood products are "off the table"

There is a wide range of acceptable blood interventions within the Jehovah's Witness community—50% will actually take some form of blood transfusions. Therefore it is imperative to begin discussions prenatally to educate and review all possible options to be available at the time of delivery.[3,4]

RECOMMENDATIONS

Prenatal Care

1. Comprehensive discussion with a checklist specifying acceptable interventions[5]

2. Aggressively prevent anemia (goal: maintain HCT: 36-40%)
    - Iron—PO or IV (iron sucrose or ferric carboxymaltose) (+Folate and B12)
    - rh-Erythropoeitin 600 u/kg SQ 1-3x per weekly (each dose contains 2.5mL of albumin so is not always acceptable)

3. Line-up Consultants (consider MFM, Hematology, Anesthesiology)

Labor and Delivery

Early anesthesia consultation

1. Reassessment of hemorrhage risk and discussion of options (e.g. Surgery, Interventional Radiology)

2. Review specific techniques (e.g. Options Checklist and Fibrin/Thrombin glues)[6]

3. Review references—Have a Plan![7]

4. Be decisive

Postpartum

1. Maintain volume with crystalloids and blood substitutes

2. Aggressively treat anemia
   - Iron—IV (iron sucrose or ferric carboxymaltose)
   - Rh-Erythropoeitin 600 u/kg SQ weekly (3x week); RCT's show benefit in Critical Care units

DISSEMINATION STRATEGY

Since patients who decline blood products are uncommon in California, providers will often be unfamiliar with these issues. It is important to identify local physician resources (often perinatologists) and to have these protocols (informed consent and checklist, blood product management checklist and the Iron sucrose protocol) available on the unit and online via access to the CMQCC website (www.CMQCC.org). Education about this topic should be introduced in venues such as Grand Rounds.

EDUCATIONAL TOOLS, SAMPLE DOCUMENTS

1. Jehovah's Witness Consent Form and Management Checklist[8]
2. Specific Checklist for Management of Pregnant Women Who Decline Transfusions
3. IV Iron Sucrose and Ferric Carboxymaltose Protocols

EVIDENCE GRADING

Level of Evidence: III C. Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees. Recommendations based primarily on consensus and expert opinion.