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Meeting the Needs of Jehovah's Witness Patients

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A multidisciplinary approach is required to meet the unique medical needs of Jehovah's Witness patients (JWP). Patient-centric care for those refusing blood or blood products ideally begins long before hospitalization.

Care of JWP begins with organizational acceptance of each patient's right to refuse blood, and understanding alternatives to transfusion. In accordance with biblical scripture, JWP generally will accept neither allogeneic nor autologous blood when its contiguity with the circulation has been disrupted. This prohibition applies to whole blood and blood components. However, there is substantial variation among JWP regarding acceptable blood products, derivatives, procedures and alternatives.¹ Accordingly, no single list of "acceptable" products is definitive. Rather, each JWP should be informed of treatment options to allow for consultation with spiritual advisors and individual decisions consistent with their beliefs.^{2,3}

For example, autologous cell salvage with the utilization of a closed continuous circuit may be acceptable to some,⁴ because this process allows blood to continue within a closed extension of the patient's circulatory system. Cardiopulmonary bypass (CPB), excluding allogeneic blood for priming the circuit, may also be acceptable. Obviously, consideration of organ transplants may require extensive consultation. A coordinated approach to such patients may be facilitated by the hospital transfusion committee or other entity assigned this function. The following may play important roles in this process:

1. **Pre-hospital Management:** Diagnose and treat anemia before admission for elective procedures
2. **Prevention of Iatrogenic Anemia:** All blood draws must have a specific indication, with ongoing care influenced by results. The volume

Key Points

- Accept the right of the Jehovah's Witness patient to refuse blood and blood products.
- Convene a multidisciplinary team to identify alternatives for allogeneic transfusion.
- Review policies on blood informed consent/refusal, release of liability, and state law.
- Establish a relationship with the local Jehovah's Witness Hospital Liaison Committee.
- Educate all hospital personnel concerning processes that serve Jehovah's Witness patients by offering them choices regarding their care.

of blood used for tests must be minimized, and blood from central lines not discarded. Prevent redundant phlebotomy orders, and be vigilant for "hidden" phlebotomy orders within order sets.

3. **Operative Management:** Where appropriate, acute normovolemic hemodilution (ANH) may be useful.⁵ The ANH-derived blood, prior to its reinfusion, must be stored in a reservoir that is part of a closed circuit. Other intraoperative conservation measures include:
 - Intraoperative blood salvage in a closed circuit;
 - A low prime CPB circuit, which facilitates smaller pump priming volumes for cardiothoracic surgery patients;
 - Ultrafiltration to concentrate blood remaining in a CPB circuit and preserve the clotting factors for reinfusion;⁶

- Meticulous surgical dissection techniques to reduce microvascular bleeding during/after surgery;
 - Appropriate use of off-pump cardiothoracic procedures; and
 - Pharmacologic hemostasis: Antifibrinolytic agents (e.g. tranexamic acid, epsilon amino caproic acid) may be considered⁷
 - Platelet gel (i.e., platelet rich plasma with 10% thrombin), for cardiac, orthopedic, head and neck, and plastic surgery does not accommodate a closed circuit; the patient must explicitly accept its use.⁸
 - Recombinant clotting factors
4. **Ethical/Legal Considerations:** JWP often carry a durable Power of Attorney documenting their choice not to receive blood. Patients who do not wish to receive blood products should be identified at registration. Never assume a JWP will refuse blood, including in cases of life-threatening emergency. Patients declining blood should sign a release of liability. Exception criteria compliant with state law for pregnant or minor patients who wish to refrain from receiving blood or blood products must be determined before needed. It is important to review your facility's blood informed consent/refusal policy, including the release of liability verbiage, to ensure legal compliance. A 24/7 phone number allowing physicians to seek guidance from quality/risk management or legal counsel is helpful.

The attending physician is responsible for documenting blood refusal. This cannot be delegated to non-physician staff. Communicating blood refusal may be accomplished by:

- Hard-coding this into the electronic medical record;
- Placing an armband imprinted with the "No Blood" symbol on the patient's wrist along with documentation on the ancillary paper chart and above the patient's headboard;
- Providing face-to-face handoff communicating the "No Blood" status when the patient is transferred; and
- Providing a transfusion alternatives, integrated into the informed consent/refusal form, to record what products the patient will and will not accept.

It is important to recognize that initial refusal of transfusion may not constitute refusal in perpetuity. As changes in the patient's diagnosis or clinical status occur, the physician should reconfirm the continued refusal and document it or any changes with appropriate consents.

A helpful step is to establish a relationship with the Jehovah's Witness Hospital Liaison committee, which can be reached at (718) 560-4300 or hid.us@jw.org. Their services include:

- 24/7 support for hospitalized members and assistance with locating physicians and hospitals that support alternatives to allogeneic transfusion; and
- A Medical Alternatives to Blood Transfusion folder containing educational materials for medical personnel explaining the requirements of their members and techniques to avoid allogeneic transfusion.⁹

Finally, educate all clinical and non-clinical staff concerning identification of the "No Blood" status for Jehovah's Witnesses, hand-off requirements, and available resources.

References

1. Berend K, Levi M. Management of Adult Jehovah's Witness Patients with Acute Bleeding. *Am J Med.* 2009;122(12):1071-6.
2. Smith, ML. Ethical Perspectives on Jehovah's Witnesses' Refusal of Blood. *Cleve Clin J Med.* 1997;64(9):475-81.
3. Dixon JL, Smalley MG. Jehovah's Witnesses. The Surgical/Ethical Challenge. *JAMA.* 1981;246(21):2471-2.
4. Anonymous. Be Guided by the Living God. *The Watchtower.* June 15, 2004;19-24. Available from: <http://wol.jw.org/en/wol/d/r1/lp-e/2004445>
5. Acute Normovolemic Hemodilution (ANH) : A Practical Approach. Available from: <http://www.nataonline.com/np/432/acute-normovolemic-hemodilution-anh-practical-approach> Last accessed 12/4/13.
6. Colli A, Balduzzi S, Ruyra X. The Hemobag: the modern ultrafiltration system for patients undergoing cardiopulmonary bypass. *J Cardiothorac Surg.* 2012;7:55.
7. Hamlin BR, Blood Management in the 21st Century: The Importance of Teamwork. *Orthopedics Today* Feb 2011.
8. Everts PA, Knape JT, Weibrich G, et al. Platelet Rich Plasma and Platelet Gel: A Review. *J Extra Corpor Technol.* 2006;38(2):174-87.
9. Anonymous. Medical Alternatives to Blood Transfusion. *Awake!* 2012;93(9):25-6. Available from: <http://www.jw.org/en/publications/magazines/g201209/medical-alternatives-to-blood-transfusions/>



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