Donor Human Milk

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Expanded Commentary from the Faculty

The benefits of breastfeeding are well established, but in some situations parents may look for alternative sources of human breast milk to feed their babies. Both the World Health Organization and the American Academy of Pediatrics recommend the use of pasteurized donor human milk for preterm infants when a mother's own milk is unavailable or insufficient. Unfortunately, many clinicians are not aware of the increasing availability of donor human milk, or they may think the industry disappeared in the 1980s or 1990s due to the rise of the human immunodeficiency virus (HIV).

Many mothers of preterm infants struggle to make enough milk for their babies soon after giving birth and often cannot satisfy their baby's nutritional needs. As a result, preterm babies are frequently fed formula. Donor milk can bridge this gap, providing babies with access to human milk and all of its health benefits. For example, studies show a dramatic decrease in infections and necrotizing enterocolitis from the use of donor human milk.

Research studies show that donor human milk—which comes from healthy lactating mothers who have extra milk—is safe and nutritious. It is processed, pasteurized, and can be fortified, and it is readily available in most states through non-profit and commercial entities. Currently, 12 non-profit donor banks operate in the United States and Canada under the guidelines of the Human Milk Banking Association of North America.

An important issue in implementing the use of donor human milk is helping both NICU staff members and parents of preterm infants overcome the "yuck" factor associated with it. This can be accomplished by making staff and parents aware of the unequalled benefits of human milk—whether it comes from a mother or a donor.

Another perceived issue in implementation is cost. Fortunately, there is a good economic argument for using donor human milk in the NICU. Data show that it is inexpensive compared to the very costly infant morbidities that can occur without its use. The more "humanized" the diet of small babies, the better their health outcomes, the lower the morbidity, and the lower the health care costs.

Licensing can be a third issue hindering implementation—California, Maryland, and New York states classify human milk to be a "tissue," so the hospital must have a tissue bank license to provide donor human milk.

Institutionally, it is important for NICUs to have guidelines so that (1) donor milk is used as a bridge until a mother's milk is available, (2) that it is fortified just like a mother's milk, and (3) that it is not used as the sole source of nutrition. Mothers should be encouraged to continue pumping their own milk while infants are receiving donor milk.

Implementation of donor human milk in a NICU starts with education. Staff members need to understand that the nutritional and health effects of human milk are multiplied many times in preterm infants. Furthermore, they need to be aware that not all preterm mothers can readily make milk and may need help, which should ideally come from donor human milk.

Group Discussion Items

1. How is the use of donor human milk reflected in the guidelines and/or practices in our hospital?
2. Do our policies or practices differ from the discussion provided by Dr. Kim?
3. Given our policies, are there ways to improve our current practices?
4. Discuss other approaches that might be used.
5. Are there related problems we haven't talked about?

Suggested Readings and Resources

1. Cristofalo EA, Schanler RJ, Blanco CL, et al. **Randomized trial of exclusive human milk versus preterm formula diets in extremely premature infants**. *J Pediatr*. 2013; August 20.

2. Bertino E, Giuliani F, Baricco M, et al. **Benefits of donor milk in the feeding of preterm infants**. *Early Hum Dev*. 2013; August 6.

3. Updegrove K. **Nonprofit human milk banking in the United States**. *J Midwifery Womens Health*. 2013;July 29.

4. Parker MG, Barrero-Castillero A, Corwin BK, et al. **Pasteurized human donor milk use among US level 3 neonatal intensive care units**. *J Hum Lact.* 2013;29:381-389.

5. Human Milk Banking Association of North America. **www.hmbana.org**