Donor Milk Availability in the Neonatal ICU: Surrogate for Change?

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Dr Kantarowska and colleagues have brought welcome attention to the benefits of donor human milk for very low birth weight (VLBW, birth weight <1500 g) infants.1 Their intriguing study examines the relationship between the availability of donor human milk at the institutional level and: (1) rates of breastfeeding (provision of any breastmilk) at discharge among VLBW infants and (2) in-hospital rates of necrotizing enterocolitis (NEC), a severe and potentially life-threatening illness for VLBW infants. The authors astutely tapped into the data of a large and well-coordinated Perinatal Collaborative (California Perinatal Quality Care Collaborative), whose hospital members are served exclusively by the largest Human Milk Banking Association of North America donor milk bank in the United States. They were thus able to collect information on donor milk availability, breastfeeding rates, and rates of NEC for >90% of VLBW infants in California, the state with the highest (current) number of births over a 6 year period (2007–2013). This treasure trove of information produced the welcome and not surprising result that donor milk availability was associated, at an institutional level, with increased rates of breastfeeding at discharge and lower rates of NEC.

It is tempting, however, to confuse correlation with causality. Although institutional level donor milk availability was “linked to better outcomes for the VLBW infants treated at that NICU,” this association likely is multifactorial, and donor milk availability may be better interpreted as a marker of progress than as a driver of change. No question, there is good evidence that feeding donor human milk, as compared with formula, significantly reduces the risk of NEC among VLBW infants: for infants whose mothers are not able to provide their own breast milk, donor milk may be life-saving.2 Feeding mother’s own milk significantly reduces risk of NEC,3–5 and increases in rates of breastfeeding in NICUs were independently linked to decreases in rates of NEC, as described in a (separately published) quality improvement project performed in 11 of the California Perinatal Quality Care Collaborative NICUs during the time period studied by Dr Kantarowska et al.6 The described “change packet” of this protocol did not directly address donor milk availability, but it is likely that the advocacy, awareness, and education associated with such multifaceted breastfeeding promotion interventions have a ripple effect that opens the institutional door to a formal donor milk procurement policy.

Kantarowska et al1 conclude with perhaps the most critical message, namely that donor milk availability should be considered as “part of broad strategies to improve nutrition.” Certainly the initial concern that providing donor milk in the NICU would reduce rates of breastfeeding has been debunked.1,7 However, it is widely appreciated that initiating and sustaining lactation remains a great challenge to mothers of VLBW infants. A systematic review identifying effective methods of breastfeeding promotion in NICUs offers food for thought: skin-to-skin...
Donor milk availability is a wonderful thing, but pragmatically institutions may experience challenges with procurement, reimbursement (who pays?), and even rationing. Availability requires careful and clear protocols, and while a potentially life-saving intervention, donor milk cannot slay the entire dragon of either NEC or low breastfeeding rates in NICUs.

Finally, no discussion about breastfeeding is complete without note of health disparities, which lurk within this study as well as others. Kantarowska et al. report but do not emphasize that being of Hispanic ethnicity or African–American race were each independently and significantly associated with both risk for NEC and with not breastfeeding. Lack of prenatal care is a marker for poverty, insurance instability, and adverse birth outcomes, and was also significantly associated with not breastfeeding in the final multivariate regression. We clearly have our work cut out for us: the challenge is to extend effective interventions, including provision of mother’s own milk, or donor milk as needed, to every mother and her VLBW infant.

REFERENCES


ABBREVIATIONS

NEC: necrotizing enterocolitis
VLBW: very low birth weight
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