

Newborn Critical Care Center (NCCC) Clinical Guidelines Milk Drops Protocol for Infants < 28 Weeks

INTRODUCTION

Providing milk drops beginning in the first week of life along with individualized developmental care has been associated with a decreased length of stay (LOS) for premature infants. One study hypothesized that this cost savings and shorter time to discharge home was due to improved understanding and ability to assess signs of feeding readiness by both nurses and parents. The practice also provides the infant with a multisensory, positive oral experience that includes: taste, smell (cloth scent heart), hearing (soft voice), touch (gentle touch), and sight.

DEFINITIONS

Non-nutritive milk drops will be provided to all infants < 28 weeks, regardless of NPO status, beginning on DOL #6 following completion of Oral Immune Therapy (OIT) and continuing until corrected to 28 weeks gestation. Given the small volume of milk, absorbed by the oral mucosa (similar to OIT), there is not concern for enteral nutrition reaching the gastrointestinal tract.

Once the infant is corrected to 28 weeks, milk drops should be continued **only while receiving enteral feedings** per Speech Therapy recommendations. Given that increasing volumes are recommended with increasing gestation age, we **will not provide milk drops while NPO** once infant is corrected to 28 weeks gestation.

Drops from patient's feeding will be utilized. If "NPO" feeding will be ordered at 0.5mL every 3 hours with a comment in the order clarifying "milk drops." Every effort should be made to provide type of feeding in this order: fresh EBM, frozen and thawed EBM, human donor milk if no EBM available, formula if no EBM available and parents refuse donor milk.

PROCEDURE

After 4-handed cares:

1. Verify the feeding order in EPIC ("milk drops" should appear in the comment section if NPO)
2. Wash hands and put on gloves.
3. Obtain the feeding from the Nutrition Room.
4. Scan the patient label prior to administration.
5. Draw up volume of milk drops in the syringe:

Non-nutritive volumes offered based on post-menstrual age:

24-26 weeks \leq 4 drops (equal to 4 oral swabs)

27-28 weeks \leq 0.1mL drops

6. Use 1mL syringe
7. The syringe should only be dipped in the container ONCE.
8. Allow milk to come to room temperature / warm if taken from refrigerator
9. Ensure infant swaddled with hands to face and scent heart near face
10. RN starts gavage feed
11. Provide gentle touch and soft talking throughout the intervention

12. Infant offered 1-2 drops or swabs on to lips during gavage
13. Dipped oral swab sponge or pacifier offered to lips
14. If infant opens and accepts, additional milk drops offered with pacifier/swab in mouth
15. If no acceptance or stress cues, drops offered again
16. If no response / positive stress cues after second attempt, discontinued
17. Offered until transitioned to oral feeding with every full gavage feeding by therapies, RN, or parent after developmental care
18. After the appropriate education, parents should be encouraged to provide milk drops

DOCUMENTATION IN EMR

- Milk drops are not considered “intake” and are not included in intake/output documentation
- Document milk drops were given and neonates response to milk drops

REFERENCES:

1. O'Rourke, B., Fuller, K., Parker, L. A., & Moore, T. A. (2022). Provision of positive oral experiences for premature infants by offering Milk Drops: A clinical practice change initiative. *Journal of Neonatal Nursing*. <https://doi.org/10.1016/j.jnn.2022.11.014>
2. O'Rourke, B (2020) The Neuroprotection of Oral Enjoyment by Giving Milk Drops Dr. Brown's Medical Webinar Series <https://www.drbrownsmedical.com/webinars/the-neuroprotection-of-oral-enjoyment-by-giving-milk-drops/>