USE OF DONOR BREAST MILK IN NEWBORN INFANTS

The North West Neonatal Network (NWNODN) consists of 3 locality neonatal networks, Cheshire and Merseyside (CM) Lancashire and South Cumbria (LSC) and Greater Manchester (GM). This document has agreed by locality Clinical Effective Groups (CEG) and can be adapted for local use.

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Use of Donor Breast Milk in Newborn Infants

Definition
This guideline details the use of donor breast milk (DBM) in newborn infants in all areas, including the postnatal wards. This guideline does not include the criteria for DBM use in a community setting.

Action
Mum’s own milk is the standard feed of choice for all newborn infants. Mum should be encouraged to initiate breast feeding as soon as possible after baby’s birth. In situations when breast feeding cannot be initiated, mum should be encouraged to express breast milk and this should be provided to the baby.

Criteria for use of donor breast milk

Preterm babies (when maternal breast milk not available)
- Birth gestation <30 weeks gestation and/or birth weight <1.5kg, awaiting maternal expressed breast milk production
- Intra uterine growth retardation (IUGR), abnormal antenatal dopplers (babies born between 30 and 37 weeks gestation and/or birth weight 1.5 - 2kg)
- For gut priming in sick preterm infants in the first week of life
- Potential compromise with bowel - Short gut syndrome, post-NEC, post-surgical repair of Gastrochisis/Exomphalos
- DBM should not be routinely used for babies born between 30 and 37 weeks gestation, unless there are risk factors as outlined above

Term babies
Donor breast milk could be used in term babies only in the following situations, after referral to and subsequent assessment by the infant feeding team or the neonatal nutrition team (wherever applicable).
- Babies who are actively cooled and breast milk is used for gut protection
- Babies who are monitored under the Hypoglycaemia & Reluctant Feeding guideline.
- Babies whose mothers have lactation failure, until their milk output improves
- Absent or insufficient lactation: e.g. mothers with multiple births, who cannot secrete adequate breastmilk for their infants in the initial few days of life or post-mastectomy
- Temporary interruption of breastfeeding: e.g. maternal clinical status, caesarean sections under general anaesthesia

Consent
Written consent should be obtained from the mother before using DBM as an enteral feed

Supplementation
- DBM should be fortified when used in preterm infants
- DBM should not be routinely fortified when used in term babies
Vitamins / Folic acid / Iron, as per local guidance on nutritional supplementation

Criteria for stopping use of DBM
- Infant established on maternal breast milk
- Feeds weaned to preterm/term formula, after parental discussion

DBM should be weaned onto formula soon after 2 weeks of full enteral feeds in high risk babies and as soon as feasible in all other babies if the mother chooses to feed the baby on preterm formula. Continuing the baby on DBM beyond this should only be at the discretion of the attending Consultant and/or the neonatal nutrition team.

Weaning DBM to preterm formula
- Use \( \frac{1}{4} \) of preterm formula on the 1st day of weaning
- Increase formula by \( \frac{1}{4} \) of the total volume every day, to wean off DBM completely in 4 days

Storage and usage
- DBM should be stored as directed by the donor milk bank
- DBM can be kept in the freezer for 3 months, but not beyond the expiry date
- DBM must be used within 24 hours of removal from the freezer for defrosting
- Fortified DBM must be used within 6 hours from preparation

All service users of DBM should comply with the tracking procedures as outlined by the human milk bank.

Background
WHO recommends that LBW infants should be fed mother’s own milk. When a mother’s own breast milk is not available, the alternatives are either expressed breast milk from a donor mother or formula milk. Available evidence shows that compared with formula, donor human milk is associated with lower incidence of the severe gut disorder, necrotising enterocolitis, and other infections during the initial hospital stay after birth.

In preterm and low birth weight infants, feeding with formula compared with donor breast milk results in a higher rate of short-term growth but also a higher risk of developing necrotising enterocolitis. Limited data on the comparison of feeding with formula versus nutrient-fortified donor breast milk are available.

Donor breast milk (DBM) is a human body fluid and, as such, carries risks of transmission of infective agents. Donors are screened and the milk is pasteurised to minimise risk. Written consent must be obtained for the use of donor breast milk. Handling, testing and documentation of the milk in the donor milk bank and specialist feed unit is carried out according to NICE Guidelines (2010). Donor breast milk will have a variable nutrient content as seen with maternal expressed breast milk and may not contain optimum nutrients for the growth of preterm infants. Additionally it may be further compromised by heat treatment.
References:


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<th>Auditable Standards</th>
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<td>1. Term babies in the postnatal ward should not be given DBM routinely without review by the infant feeding team. Target 95%</td>
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<td>2. Written consent should be obtained from the mother before using DBM as an enteral feed. Target 100%</td>
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