

Provision of Maternal Colostrum to Very Preterm Infants: The Golden Drops Project

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Dear Sir,

Around 16% of preterm infants born worldwide are born less than 32 weeks gestation (WHO, 2018). Providing early expressed breastmilk (EBM), specifically maternal, has a range of benefits for preterm babies. It reduces the incidence of necrotising enterocolitis (NEC) and retinopathy of prematurity, improves the immune system and promotes a healthy gut microbiome (Tao, 2020). British Association of Perinatal Medicine guidelines recommend that preterm babies receive their first drops of colostrum within the first 6 hours of life and definitely before they reach 24 hours old. This is mirrored in the National Feeding Policy (HSE, 2019) which recommends that expressing for mothers is commenced within the first hour following delivery. Donor breastmilk is considered the second-best option for preterm babies if colostrum has not been obtained (Wilson, 2017). It is the role and responsibility of the staff in the neonatal unit and the maternity department to work towards obtaining early breastmilk.

The aim of this audit was to review recent practices on obtaining and providing expressed breastmilk for preterm infants born \leq 32 weeks gestation. We wanted to determine whether these infants received maternal, or donor expressed breastmilk as part of their first oral drops of feed and at what age in hours it was given. We performed a retrospective chart review using a self-designed tool comprising of infants born between May 1st 2021 and January 31st 2022. The standards we have adopted are 'Optimising Early Maternal Breastmilk for Preterm Infants' from BAPM. Only inborn infants at the University Hospital Galway were included. Nursing notes of all babies who met the criteria were used to obtain the required information. Data was collected in the first week of February 2022. The audit was approved by the hospital Audit Committee.

There were 20 eligible infants during the study period. Twelve infants (60%) received maternal EBM as their first drops of oral feed while eight infants (40%) received donor EBM. The set target in our unit is to have 80% of babies receiving maternal EBM as their first oral drops. Four infants (20%) received maternal EBM within the first 6 hours. BAPM guidelines (BAPM, 2020), recommend all preterm infants should ideally receive colostrum before six hours of age. Our aim is to have 80% of eligible infants in this category. Ten infants (50%) received maternal EBM and 16 infants (80%) received either maternal or donor EBM in the first 24 hours of life.

This audit has identified areas for improvement within the unit. We plan to increase staff engagement with the initiative to improve the number of babies receiving maternal EBM from 60% to 80%. The findings will be presented to the neonatal, antenatal, labour and postnatal ward staff as they all play an important role in commencing and continuing hand expressing. We recommend more education for nursing and medical staff, improving communication between the stakeholders, addressing barriers which are hindering the provision of early EBM, nominating champions to maintain momentum, and promoting family integrated care. A retrospective audit will be repeated in September 2022 on the previous 8 months to assess whether any improvements have been made.

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