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ORIGINAL ARTICLE

Feeding practices with human milk in newborns less than 1500 g or less than 32 weeks☆,☆☆

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Abstract
Introduction: There is currently no unified policy on either breastfeeding support or enteral nutrition practices, as regards human milk (HM) in pre-term newborns. The aim of this study was to describe breastfeeding support measures, as well as the use of HM in very preterm infants in Spanish public hospitals.
Method: A questionnaire on enteral feeding practices was distributed. Data were analysed from units caring for newborns less than 32 weeks or 1500 g. A univariate analysis was performed comparing level II and III care units.
Results: There was a 91% response rate. A total of 93 units cared for infants less than 32 weeks or 1500 g (17 level II and 76 level III), and 49% of the units recorded the breastfeeding rate on discharge. Around 75% (70/93) had a guideline on managing HM (level III 81 vs. level II 47%, $P = .002$), and 25% had access to donor human milk. Just under half (46%) started trophic feeding in the first 6 h. Target enteral feeding volume in stable preterm infants was ≥180 ml/kg/day in 89% of the units (level III 93% vs. level II 70%, $P = .017$). HM fortifier was used in 96% of the units. In 92%, it was added when the required enteral volume was tolerated. In 59% of the units, adjustments in the quantity of fortifier were made according to weight, and in 36%, it depended on analytical criteria. Some units (9%) used pure protein fortifier.

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Conclusions: There is a marked variability in breastfeeding support measures and in feeding practices of preterm infants in Spanish neonatal units.

PALABRAS CLAVE
Recién nacidos de muy bajo peso;
Prematuros;
Leche materna;
Apoyo a la lactancia materna;
Fortificación de leche materna;
Alimentación enteral;
Nutrición enteral

Prácticas de alimentación con leche materna en recién nacidos menores de 1.500 g o de menos de 32 semanas

Resumen
Introducción: Actualmente no existe una política unificada de cómo promocionar la lactancia materna en la unidad neonatal ni sobre la práctica de nutrición enteral con leche materna (LM) en los prematuros. Nuestro objetivo fue describir las medidas de apoyo a la lactancia y la utilización de LM en grandes prematuros de los hospitales públicos españoles.
Método: Se distribuyó un cuestionario sobre prácticas de alimentación enteral. Se analizaron los datos de las unidades que atendían a menores de 32 semanas o 1.500 g. Se realizó un análisis univariante comparando las unidades de nivel II y III.
Resultados: La tasa de respuesta fue del 91%. Un total de 93 unidades atienden a menores de 32 semanas o de 1.500 g (17 de nivel II y 76 de nivel III). El 49% registra la tasa de lactancia al alta. En el 75% (70/93) existe una guía de manejo de LM (nivel III 81 vs. nivel II 47%; $p = 0{,}002$). El 25% dispone de leche donada. El 46% inicia alimentación trófica en las primeras 6 h. En el 89% el volumen máximo de LM administrado es $\geq$180 ml/kg/día (nivel III 93 vs. nivel II70%; $p = 0{,}017$). Se fortifica en el 96% de las unidades y el 92% la inicia a partir de un volumen determinado de leche. Para modificar la cantidad de fortificante, el 59% utiliza la curva de peso y el 36% criterios analíticos. El 9% emplea fortificante proteico puro.
Conclusiones: Existe una gran variabilidad en las medidas de apoyo a la lactancia y en las prácticas de alimentación enteral de los grandes prematuros en las unidades españolas.

Introduction

Some authors have reported that the most frequent cause of acquired immunodeficiency is currently exposure to artificial formulas.[1] Being aware of this and of the additional advantages of feeding with human milk (HM) for preterm infants, the professionals working in neonatal units seek to foster practices that support breastfeeding. There is currently no unified policy for promoting breastfeeding in neonatal units. Many strategies have been analysed, but in a systematic review in 2009[2] the most effective measures were kangaroo care, mother-to-mother support, milk expression by double pumping, training of healthcare professionals and accreditation of the associated maternity unit under the Baby-Friendly Hospital Initiative (BFHI), known in Spain as the Iniciativa para la Humanización de la Asistencia al Nacimiento y la Lactancia (IHAN). In spite of all this, preterm infants commence breastfeeding less frequently and for a shorter duration than those born to term.[3]

On the other hand, there is increasing evidence that proper growth of preterm infants is related to better neurological development.[4] However, HM does not cover all the nutritional needs of infants born at less than 32 weeks' gestation or with a birth weight of less than 1500 g. To try to ensure that these infants grow properly, the European Society for Paediatric Gastroenterology, Hepatology and Nutrition, the American Academy of Pediatrics and the World Health Organization recommend that HM should be fortified.[5–7] In a Cochrane review in 2004[8] it was found that preterm infants fed with fortified HM showed greater weight gain and linear and head circumference growth than those that were not fortified. In any case, despite these recommendations, there is no unified policy on enteral feeding practices and HM supplementation in preterm infants.

The objective of this study was therefore to describe the measures supporting breastfeeding and enteral feeding practices with HM in newborns with a birth weight of less than 1500 g or a gestational age of less than 32 weeks in Spanish public hospitals. In addition, practices in level II neonatal units were compared with those in level III units.

Method

Between November 2013 and March 2014 we distributed a questionnaire on breastfeeding support measures among level II and III neonatal units in Spanish public hospitals.