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Breastfeeding the late preterm infant: Can we improve something?

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Introduction: Late Preterm Infants (LPI) - 34 weeks 0 days to 36 weeks 6 days - are representing the largest proportion of preterm infants. Breastfeeding difficulties are frequently reported in LPI compared to term infants due to immaturity of the oral-motor reflexes, difficulties in coordinating sucking with deglutition and breathing, hypotonia, immaturity of state control and perinatal associated comorbidities. Also, studies have consistently reported an increased risk for lack of breastfeeding initiation and shorter duration of breastfeeding in LPI.

Aim: The authors aimed to find risk factors for breastfeeding difficulties and lower rates of breastfeeding in LPI.

Material & Methods: The retrospective study included LPI (340-366 weeks gestation) born between January 1, 2013 and December 31, 2016 in the maternity of the Clinical County Emergency Hospital Sibiu, a level III regional unit. The unit protocol for breastfeeding follows the 10 steps recommended by the Baby Friendly Hospital initiative. Infants not fed at discharge were excluded. Maternal and neonatal characteristics, epidemiological and clinical data were extracted from neonatal charts and comparatively analyzed between exclusively breastfed LPI and fed with breast milk and/or formula (mixed feeding). Statistical analysis was performed using SPSS for Windows 10.0; p was considered statistically significant if < 0.05 (CI 95%).

Results: During the study period 489 LPI were care in our unit, 3 of them being submitted, without feedings to pediatric surgery. Therefore, the final study group comprised 486 LPI, 103 exclusively breastfed (21.2%), 36 exclusively fed with formula (7.4%) and 347 with mixed feedings (71.4%). No significant difference was found as regards birth weight, gestational age, gender, maternal age and parity area of residence, maternal education, pregnancy care, delivery mode, most important postnatal conditions (respiratory distress, birth asphyxia and need for resuscitation, maternal-fetal infections, persistent fetal circulation, jaundice needing phototherapy, anemia), need for hospitalization in the Neonatal Intensive Care Unit (NICU) or hospitalization length ($p > 0.05$) between the study groups. Late preterm infants exclusively breastfed at discharge had significantly lower Apgar scores at 5 minutes (9.0 ± 1.4 vs. 9.3 ± 0.9 ; $p = 0.017$) and spent significantly more days in the NICU (8.8 ± 13.4 vs. 5.4 ± 6.0 days; $p = 0.015$) compared to those with mixed feedings. A low rate of exclusive breastfeeding was noted in LPI twins (13.7%) and those born from pregnancies obtained with assisted reproductive techniques (ART) (1.7%). Of note, an increased rate of exclusive breastfeeding was noted in 2016 compared to previous years of study (33.6% vs. 13.2% in 2015, 8.9% in 2014 and 22.3% in 2013; $p = 0.005$).

Conclusions: Breastfeeding rate is high but improvements can be done as regards exclusive breastfeeding rates in LPI, with efforts focused mostly for twins and infants from ART pregnancies. Concordant with other studies, we also found that longer NICU admission is associated with improved breastfeeding rates and exclusive breastfeeding.

Biography

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