BREASTFEEDING AS A PROTECTOR FACTOR FOR ACUTE BRONCHIOLITIS

The advantages of breastfeeding are largely documented. Amongst other positive effects it reduces the risk of infectious disease in infants. We evaluated the effect of breastfeeding in the length of stay for infants with moderately ill bronchiolitis.

Methods Prospective descriptive study including all moderately ill bronchiolitis infants admitted to our hospital between 2011–2014. They were grouped in exclusively breastfed or not. Severe bronchiolitis and patients with serious risk factors were excluded. The primary outcome was length of stay (LOS). The following variables were recorded: age, sex, atopic dermatitis, parental smoking, atopy in parents, number of siblings, RSV, treatment received and clinical scale of bronchiolitis at admission.

Results Among the 185 enrolled infants, 54.5% were exclusively breastfed. There were no statistically significant differences (p > 0.05) in: male gender (47% vs 44%), atopic dermatitis (31% vs 31%), smoking parents (37% vs 44%), parental atopy (31% vs 31%), number of siblings (0.66 vs 0.68) day care attendance (16% vs 10%) and percentage of positive RSV (61% vs 60%). The median LOS in the breastfeeding group was 3.14 days compared with 2.82 days in the other group (p = 0.004). There were statistically significant differences in median age (p = 0.000) and the severity at admission (p = 0.021).

Conclusion In our series, breastfeeding does not protect from bronchiolitis. The breastfeeding group were admitted at a younger age which could explain their longer LOS. Interestingly, breastfed infants had a lower score of severity at admission suggesting a relative protective role of against severe bronchiolitis.

RIGHT VENTRICULAR FUNCTION IN INFANTS WITH SEVERE BRONCHIOLITIS AND DIFFERENT RESPIRATORY SUPPORT

Cardiac dysfunction during bronchiolitis has been reported but few studies have assessed right ventricular function (RVF). The aim of this study was to assess RVF in infants with severe bronchiolitis with different respiratory support.

Methods Prospective study of under 3-month-old infants admitted to the PICU for severe bronchiolitis. Patients were classified in 3 groups according to the respiratory support: CPAP, bilevel positive airway pressure (BLPAP) and mechanical ventilation (MV). If the respiratory support was changed, echocardiography was repeated. Morphology and systolic and diastolic function were evaluated by echocardiography including Tissue Doppler imaging (TDI).

Results 30 echocardiographies were performed: 9 in infants with CPAP (4–8 cmH2O), 10 in BLPAP (13–16 cmH2O) and 10 in MV (PEEP 5–9 cmH2O and MAP 9–17 cmH2O). There was no difference in age or weight between the groups. The most relevant results are shown in Table 1.

Conclusion As respiratory support increases, decreased systolic and diastolic RVF is observed by TDI in infants with severe bronchiolitis.