1025

SCREENING AND MANAGEMENT OF NEONATAL JAUNDICE BY TRANSCUTANEOUS BILIRUBIN

E. Tiberi, L. Giordano, C. Romagnoli, E. Zecca

Department of Pediatrics, Division of Neonatology, Policlinico Gemelli UCSC, Rome, Italy

Objective: The aim of this study was to assess the validity of our previously developed skin bilirubin nomogram in predicting severe hyperbilirubinemia (> 17 mg/dl) in healthy term and late preterm newborns.

Methods: This multicenter study was conducted from February 2009 to December 2009 in the well-baby nurseries of five centres of Rome. The predictive ability of the nomogram for transcutaneous bilirubin (TCB) values in the first 96 hours of life was prospectively assessed in 2167 neonates with gestational age ≥ 35 weeks. Skin bilirubin was measured with the Bilichek and serum bilirubin was contemporary assayed by a spectrophotometric method. 1074 neonates had more than one measurements giving a total of 3241 values.

Results: The mean TSB values was $8,3 \pm 3$ mg/dl, while the mean TCB values was $9,5 \pm 3,3$ mg/dl. A sensitivity of 96,4% and a negative predictive value (NPV) of 99.9% were obtained with a single bilirubin determination applying the 75° percentile of our nomogram. Two consecutive TCB determinations identified all infants reaching TSB values > 17 mg/dl (100 % of sensitivity and 100% of NPV).

Conclusion: The 75° percentile of the skin bilirubin nomogram for the European population in the first 96 hours of life is able to predict all neonates at risk of severe hyperbilirubinemia. It is a reliable guide for intervention and follow-up, and allows a safe discharge from the hospital, also reducing a large number of blood samples.

1026

NECROTIZING ENTEROCOLITIS IN PRETERM INFANTS ON DIFFERENT FEEDING PROTOCOL

V. Marinkovic, N. Bozinovic-Prekajski,
V. Hajdarpasic

Institute for Neonatology, Belgrade, Serbia

Background and aims: Feeding with human milk (HM) is in correlation with many useful effects and represents key component in strategy of

enteral feeding of preterm infants. Objective of this research was to determine incidence of necrotizing enterocolitis (NEC) in structure of morbidity and relative risk (RR) of acquiring NEC in preterm infants fed with fortified human milk (FHM) and preterm formula (PF) respectively.

Methods: Total of 100 preterm infants of gestational age less than 34 weeks were included in this prospective analysis. Subjects were divided in two groups: group I (n=50) fed with FHM (FM 85 Nestle) and group II (n=50) fed with PF (preNAN Nestle) in case where lactation wasn't established, for 4 weeks. NEC was diagnosed if presence of intestinal pneumatosis on X-ray was verified (Bell's stage II and III).

Results: Initially, examined groups did not differ considering the gestational age, Apgar score and antropometric parameters at birth. Subjects fed with FHM reached full enteral feeding earlier compared to PF fed group ($p < 0,05$). Incidence of NEC in FHM fed group was 2%, and in PF fed group 6% ($p > 0,05$). In FHM fed group $RR = 0,33$, 95% CI (0,36-3,097), which means that risk of acquiring NEC is 33% less compared to risk in PF fed group.

Conclusion: There is no statistically significant difference between these two groups in incidence of NEC, but RR indicates a smaller risk of NEC in FHM fed group

1027

PARATHYROID HORMONE RELATED PROTEIN (PTHrP) IN PRETERM HUMAN MILK

A. Ben Tov^{1,2}, R. Lubetzky^{1,2}, S. Ben Or¹, T. Taxir¹,
G. Zeidenberg¹, S. Dollberg^{2,3}, D. Mandel^{2,3},
I. Berger^{2,3}

¹Pediatric, Sourasky Medical Center, ²Sackler
Faculty of Medicine, Tel-Aviv University,

³Neonatology, Sourasky Medical Center, Tel Aviv,
Israel

Background: Parathyroid hormone-related protein (PTHrP) has the ability to activate parathyroid hormone receptors and cause hypercalcaemia. In a previous study we demonstrated high levels of PTHrP in both term and preterm human milk (HM) (Breastfeeding Medicine, 2009). PTHrP intestinal absorption and its influence upon calcium homeostasis of the preterm infant (PTI) has not been studied yet.