

Effect of early iron supplementation on iron deficiency anemia in preterm infants

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Abstract

Background & Objective: Preterm infants have less iron storage compared with the term one. Due to rapid growth they need more iron during infancy. This study was designed to evaluate the effect of early iron supplementation on hematologic indices and incidence of iron deficiency anemia in preterm infants.

Materials & Methods: This experimental study was done on 20-days-old preterm breast-feed infants referred to the Gorgan-North of Iran primary health care services for vaccination, without any underline disease or growth retardation during 2005. They were divided to two groups (n=15 in each) and a questionnaire was completed for each case. Iron drop (2mg/kg) was given in the interventional group. Iron deficiency anemia was assessed in all sample T-student test and chi-square were used to analyze the independent variables and comparing the hematologic indices, after entering in SPSS-13 software and testing the normal distribution with komologrof-smearoff test. Relative risk index (RR) was used to compare the two groups.

Results: The relative risk of iron deficiency anemia in the interventional group was 0.4 folds [RR=0.4, CI %95 for RR=(0.091, 1.749)]. No significant difference was seen between the two groups.

Conclusion: The finding of this study showed that iron drop supplementation for preterm infant prevent the iron deficiency anemia, although this observation was not significant.

Key Words: Preterm labor, Prophylactic iron, Iron deficiency anemia

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