Abstract

Objective: To evaluate the iron nutritional status of children from 6 to 59 months of age and its relation to vitamin A deficiency.

Method: Cross-sectional study involving 100 children, living in nine cities in the state of Paraíba, which were selected for convenience to form two study groups: children with vitamin A deficiency (serum retinol < 0.70 mol/L; n = 50) and children without vitamin A deficiency (serum retinol 0.70 mol/L; n = 50). The iron nutritional status was evaluated by biochemical, haematological and hematimetric indices. The cases of subclinical infection (C-Reactive Protein 6 mg/L) were excluded. Results: Children with vitamin A deficiency had serum iron values statistically lower than the corresponding values in children without deficiency. The other iron nutritional status indices showed no statistical difference according to presence/absence of vitamin A deficiency. Conclusion: The interaction between iron and vitamin A deficiencies was evidenced in the case of circulating iron deficiency (serum iron), suggesting failure in the transport mechanisms of the mineral in children with vitamin A deficiency.

Keywords

Iron Deficiency. Vitamin A Deficiency.