Assessment of serum levels of vitamin B12 in full term neonates with indirect hyperbilirubinemia
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Abstract

Introduction: Neonatal hyperbilirubinemia is defined as a total serum bilirubin level above 5 mg per dl (85 μmol / L). Jaundice is an important problem in the first week of life. It is a cause of concern for the physician and a source of anxiety for the parents.

Objective: The aim of this work was to measure the serum levels of vitamin B12 in neonates with indirect hyperbilirubinemia and comparing them with that of apparently healthy neonates.

Subjects and Methods: This study included 80 full term neonates divided into 2 groups: Group I: 40 full term neonates with indirect hyperbilirubinemia (23 females and 17 males) aged 3-7 day's admitted to neonatal unit of Minia university hospital in the period from July to December 2017. Group II : 40 apparently healthy full term neonates as control group (20 males and 20 females ) of matched age and weight.

Results: There was a significant decrease in serum levels of vitamin B12 in cases compared to controls (P-value = 0.001*). There was no statistical difference regarding age, sex, mode of delivery, gestational age or weight between patients and controls as well as the values of hemoglobin, platelets, WBCS, and neutrophils had no statistical difference between cases and controls (P-values=NS).

Conclusion: Full term neonates with indirect hyperbilirubinemia had lower serum levels of vitamin B12 than healthy controls.

Key words: Vitamin B12, full term, neonates, hyperbilirubinemia