Original Paper

Etiologies of severe indirect hyperbilirubnemia in term neonates, Gorgan – Iran Arezoo Mirfazeli (MD)¹, Laily Najafi (MD)²

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Abstract

Background and Objective: Jaundice is a common problem among neonate undiagnosed case finally lead to kern-icterus, with significant increasing rate of subsequent morbidity. This study was done to determine the etiology of of severe indirect hyperbilirubnemia in term neonates.

Materials and Methods: This cross sectional descriptive study was performed in Taleghany hospital of Gorgan on neonates admitted due to severe hyperbilirubinemia from Sep 2004-Sep 2005. Severe hyperbilirubinemia was considered as bilirubin≥18 mg/dl in term neonates weighing more than 2500g. Bilirubin (total, direct), blood culture, retic count, coombs test, level of glucose 6 phosphate dehydrogenase enzyme, complete blood cell count, mother's and neonate's blood group, urine culture and C-reactive protein tests were measured.

Results: 766 term neonates (>2500g) were hospitalized due to hyperbilirubinemia. Severe hyperbilirubinemia was detected in 12% of cases (54 boys, 38 girls). The etiology of 41 cases were unknown, 25 cases were diagnosed as sepsis, 15 neonates were glucose 6 phosphate dehydrogenase enzyme deficient, 7 cases had UTI, 3 neonates had ABO incompatibility and one neonate was due to breast feeding.

Conclusion: This study indicated that the most common etiology of severe hyperbilirubinemia in this region is unknown. Sepsis, glucose 6 phosphate dehydrogenase enzyme deficiency, UTI, ABO incompatibility and breast feeding were among other reasons for severe indirect hyperbilirubinemia.

Keywords: Neonatal Indirect Hyperbilirubinemia, Frequency, Icter, Kern Icterus

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