Evaluation of thrombocytopenia prevalence after phototherapy in neonates with icter referring to Ardabil Bouali Hospital in 1396

Abstract

Background and Objective : Jaundice is one of the most common problems in neonatal period. In 60% of term neonates and 80% of preterm infants are seen during the first week of birth and most cases are physiologic. Hyperbilirubinemia is the most common cause of jaundice in newborns. Phototherapy is used to treat it, which seems to be safe. The symptoms of skin rash, diarrhea, body temperature, dehydration, and hypocalcemia have been noted, and in some studies, thrombocytopenia has been noted. In this study, we decided to investigate the relationship between thrombocytopenia and phototherapy in newborns.

Methods: The statistical population included 100 healthy infants with icter requiring phototherapy. A blood sample was taken at the beginning and after 24 hours before the end of the phototherapy and 48 hours after the end of phototherapy to measure the bilirubin, the verticulocytic platelet, along with other necessary tests for the study of hyperbilirubinemia.

Results: This study was performed on 100 infants with jaundice, 55 neonates and 45 girls with an average age of 8.86. The mean platelet count before phototherapy, phototherapy at 24 hours, phototherapy at the end of phototherapy, and 48 hours after phototherapy were 307500, 304570, 301520, and 311060 respectively, which was statistically significant during phototherapy.

Conclusion: The results of this study showed that phototherapy can lead to a significant reduction in platelet count in newborns.

Keywords: newborn - Hyperbilirubinemia - Icter - Phototherapy - Platelet count