Bilirubin rebound after intensive phototherapy for neonatal jaundice

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During the first week of life all newborns have increased bilirubin levels by adult standards, with approximately 60% of term babies and 85% of preterm babies having visible jaundice.Most of these cases are benign but it is important to identify those babies at risk (although rare) of acute bilirubin encephalopathy and kernicterus/chronic encephalopathy. Jaundice may also be a sign of a serious underlying illness.This prospective descriptive study was carried out in the Neonatal Intensive Care Unit among birth hospitalization neonates in Al-Gomhoreya general hospital who were diagnosed as neonatal hyperbilirubinemia during the period from January to May 2011.Our study was conducted to determine the incidence and magnitude of post-phototherapy bilirubin rebound in neonates.Subjects included neonates needing phototherapy for hyperbilirubinemia. Standard guidelines were used to start and stop phototherapy. Significant bilirubin rebound (SBR) was defined as post-phototherapy bilirubin level needing reinstitution of phototherapy.Rebound bilirubin was measured 24+/-6 h after stopping phototherapy.Among 100 neonates with hyperbilirubinemia, post-phototherapy bilirubin estimation was done. A total of 9(9%) neonates developed SBR. In neonates with SBR, bilirubin increased by 2.9 mg/dL after stopping phototherapy. Risk factors for SBR included birth at