Changing position does not improve the efficacy of conventional phototherapy

許薰惠

Chen CM;Liu SH;Lai CC;Hwang CC;Hsu HH

摘要

Abstract

The aim of this study was to compare the efficacy of position-changing phototherapy with conventional fixed-position phototherapy. Clinically well, term infants with nonhemolytic hyperbilirubinemia were enrolled in the study. After entry into the study, infants were randomly assigned to receive single-direction phototherapy with or without changing from a supine to a prone position or vice versa every 2 h. Phototherapy was initiated when the serum bilirubin concentration was greater than 15 mg/dl and was discontinued when the bilirubin level had declined below 10 mg/dl. Total serum bilirubin concentrations were measured just prior to initiation of phototherapy and at 12-h intervals until phototherapy was discontinued. The rate of bilirubin decline expressed by the first and secondary 24-h declines and overall bilirubin concentration decrease per hour were comparable between the two groups. The rebound in bilirubin levels after cessation of phototherapy was negligible, and none of the infants needed re-phototherapy. We conclude that changing an infant's position at 2-h intervals does not improve the efficacy of conventional single-direction phototherapy.