عنوان مقاله:

Effect of Phototherapy on Serum Level of Calcium, Magnesium and Vitamin D in Infants with Hyperbilirubinemia

محل انتشار:

فصلنامه آسیب شناسی ایران, دوره 13, شماره 3 (سال: 1397)

تعداد صفحات اصل مقاله: 6

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خلاصه مقاله:

Background and Objective: Phototherapy is one of the therapy methods for jaundice caused by hyperbilirubinemia. Vitamin D and bilirubin have two distinct routes of metabolism yet part of their syntheses is common in the liver and thus they may influence each other's synthesis. One of the consequences of phototherapy not previously studied in detail is hypocalcaemia and hypomagnesaemia. The current study aimed at investigating the effect of phototherapy on serum level of calcium, magnesium, and vitamin D.Methods: The current semi-experimental investigation was conducted on 50 term infants with jaundice that had phototherapy indication. Bilirubin, calcium, magnesium, and vitamin D were measured in their blood samples at admission and then 48 hours after beginning the phototherapy. Data were analyzed with SPSS version 16 using paired-samples t test. Results and Discussion: The serum calcium was 9.85 mg/dL before phototherapy and significantly decreased after it (9.51 mg/dL) (P<0.001). Also, the mean serum magnesium was 2.21 mg/dL before phototherapy and significantly decreased after it (2.06 mg/dL) (P=0.047). The mean of serum vitamin D significantly increased after phototherapy (before 17.44 mg/dL and after 21.77 mg/dL) (P<0.0001). The current study showed that phototherapy could decrease the level of calcium and magnesium and .increase the level of vitamin D

کلمات کلیدی:

Phototherapy, Hyperbilirubinemia, Calcium, Magnesium, Vitamin D