

عنوان مقاله:

Evaluation of the Effect of Vitamin D on the Length of Hospital Stay in Children with Gastroenteritis Aged ۳ Months to ۱۴ Years Admitted to the Pediatric Hospital of Bandar Abbas

محل انتشار:

دوماهنامه پزشکی هرمزگان، دوره 22، شماره 3 (سال: 1397)

تعداد صفحات اصل مقاله: 5

نویسندگان:

Mohammad Bagher Rahmati - *Department of Pediatric Infectious Diseases, Children's Clinical Research Development Center, Faculty of Medicine, Hormozgan University of Medical Sciences, Bandar Abbas, Iran*

Alireza Nikbakht - *Department of Pediatric Infectious Diseases, Children's Clinical Research Development Center, Faculty of Medicine, Hormozgan University of Medical Sciences, Bandar Abbas, Iran*

Mehran Ahmadi - *Department of Pediatric Infectious Diseases, Children's Clinical Research Development Center, Faculty of Medicine, Hormozgan University of Medical Sciences, Bandar Abbas, Iran*

خلاصه مقاله:

Background: Acute gastroenteritis is one of the major causes of pediatric hospitalization and mortality worldwide. Vitamin D can improve the immune system, and its deficiency may exacerbate the severe symptoms of any infectious disease. Thus, the aim of this study was to investigate the effect of vitamin D on children admitted to a hospital due to acute gastroenteritis. Methods: In this double-blind randomized placebo-controlled trial, ۱۰۰ children aged ۳ months to ۱۴ years old hospitalized due to acute gastroenteritis in Bandar Abbas pediatric hospital, Iran, were enrolled. The participants were divided into two groups of case and placebo ($n = ۵۰$ per group). Patients were excluded from the study if they met the exclusion criteria. After obtaining parental (or guardian) consent, in addition to the conventional treatment of gastroenteritis, the placebo group received ۲ cc of olive oil (as placebo) and the cases received ۱۰۰۰۰۰ IU of vitamin D (ZAHRAVI Vit D۳). Discharge criteria included reduction of fever and defecation and improvement of the patient's general condition. The required data including age, sex, baseline serum vitamin D level, level of dehydration, axillary temperature, and length of hospital stay were recorded in a checklist by a physician. Descriptive statistics, chi-square test, and Student's t-test were used to compare the recorded data in SPSS, version ۲۴. Results: The mean lengths of hospital stay were ۳.۴۶ and ۲.۵۴ days in the placebo and case groups, respectively, indicating a significant difference between the two groups in this regard ($P < ۰.۰۰۱$). However, there were no significant age and sex differences between the two groups regarding hospital stay ($P = ۰.۰۹$ and $P = ۰.۱۴$). Furthermore, there was no significant relationship between length of hospital stay and the level of dehydration in either group ($P = ۰.۱۵$). We found that axillary temperature at discharge was significantly lower in the vitamin D group than the placebo group ($P = ۰.۰۱۷$). In general, length of hospital stay was shorter in the vitamin D group, and there was no difference between patients with baseline vitamin D level of < ۳۰ ng/mL and those with vitamin D level of ۳۰ ng/mL in the vitamin D group regarding length of hospital stay ($P = ۰.۰۵۷$). On the contrary, in placebo group, hospital stay was significantly longer in those with vitamin D level of < ۳۰ ng/mL ($P = ۰.۰۳۹$). Conclusions: This prospective study demonstrated that vitamin D supplementation is significantly related to the reduction of hospital stay in pediatric acute gastroenteritis patients aged ... ۳ months to ۱۴ years old. This fi

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1500240>

