البحث السابع

جنوان البحث : عنوان البحث : قياس مستوي فيتامين (د) في الأطفال ذوى الحالات الحرجة. Serum Level of Vitamin D in critically III Childern. <u>المشاركون في البحث :</u> أد. محمد عزت الغواص * – أسامة السيد محمد * – د. سيد علي أمين * – د. شهيرة الشافعي * * – ط. غادة محمد الأمير * *قسم طب الأطفال – جامعة الفيوم * قسم الباثولوجيا الإكلينيكية – جامعة الفيوم

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ABSTRACT

- **Objective**: The aim of this work is to assess the level of vitamin D in critically ill children and to determine its association with clinical outcomes, duration of pediatric ICU stay and mortality.
- **Methodology:** This cross-sectional case-controlled study included 40 patients who were admitted to pediatric intensive care unit in Fayoum governorate in Egypt between May 2015 and February 2016. The study also included 40 healthy children as a control. Blood was collected 48 hours after PICU admission and analyzed for 25 (OH) vitamin D concentrations by using ELISA.
- **Results:** Median 25(OH) vit D level was 23.70 ng/ml (5.67-30.85)) in pediatric intensive care unit (PICU) patients vs. 34.70 ng/ml (18.27-45.32) in healthy children (p = 0.003). The prevalence of 25(OH) vitamin D deficiency (< 20 ng/ml) was 40 % in PICU patients and 25 % in the control group (p = 0.006). Respiratory illness (37.5%), heart failure (20%) and metabolic disorders (12.5%) were the three most common reasons for admission to PICU. Lack of sun exposure and vitamin D supplementation are strongly related to vitamin D deficiency (p value >0.0001). There is negative correlation between vitamin D and age, weight and PICU stay (p value 0.034, 0.018 and 0.335 respectively).
- **Conclusions:** The prevalence of vitamin D deficiency is common among pediatric patients admitted to PICU. There was no statistically significant difference between vitamin D status regarding admission diagnosis, mechanical ventilation, PICU length of stay and mortality.

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