



الملخص الإنجليزي للأبحاث المقدمة من

الدكتور ه / ساره ابراهيم ابوالنور مدرس طب الأطفال كلية الطب جامعة الفيوم الى
اللجنة العلمية الدائمة لطب الأطفال للحصول على اللقب العلمي لوظيفة أستاذ مساعد



كلية الطب – جامعة الفيوم
قسم الأطفال

البحث السادس

(بحث مشترك منشور مشتق من رسالة علمية)

عنوان البحث:

انتشار الخلل الألكتروليتي في الدم وتأثيره على معدل الوفيات بين الأطفال المصابين بأمراض خطيرة

The prevalence of dyselectrolytemia and its effect on mortality among critically ill children

المشاركون في البحث:

د.اسامة السيد بخيت* - د.نهى عبد الغفار** - د.رانف ميلاد* - د.ساره ابراهيم ابو النور*
*قسم الأطفال**قسم الباثولوجيا الإكلينيكية - كلية الطب جامعة الفيوم

مكان وتاريخ النشر

Al-Azhar Journal of Pediatrics, 26(4), 3721-3732.

doi: 10.21608/azjp.2023.325930

ABSTRACT

Background: To determine the prevalence and outcome of electrolyte imbalance in critically ill children admitted in Pediatric Intensive Care Unit (PICU) of Fayoum university hospital.

Methods: this observational study included 100 children between one month and 14 years admitted in Fayoum university hospital PICU between March and November 2019. Blood samples were drawn to determine sodium, potassium, and magnesium excluding children who received electrolyte solutions within the last 24 hours. **Results:** A total of 100 children were included in this study. Electrolyte disturbance was present in 65 patients (65%).

Hyponatremia was the most common electrolyte abnormality, seen in nearly half of the patients 49 case (49%) while hypernatremia was present only in 4 cases. Percentage of hypomagnesaemia children was 3% and hypermagnesemia was 40%. hypokalemia was present in 18 patients (18%) and hyperkalemia in 10% patients. The majority of patients (88%) were discharged and 12% died. Electrolyte imbalance was seen in 10 out of 12 deaths of the studied patients. According to receiver operating characteristic curve for mortality between serum Magnesium, potassium and sodium show prediction of mortality of sodium is more than that of potassium more than that for magnesium as area under the curve of serum sodium is (0.725) while potassium is (0.643) and magnesium is (0.598). **Conclusions:**

Dyselectrolytemia is a common problem in pediatric patients admitted to PICU. Mortality was higher in patients with hyponatremia and it is more predictive of mortality than serum magnesium and potassium. Keywords: sodium; potassium; magnesium; mortality; pediatric intensive care unit

عميد الكلية

رئيس القسم

أ.د/ حمدى محمد ابراهيم

أ.د / احمد محمود عبد المقتدر