Incidence of electrolyte imbalance in children with acute gastroenteritis

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Abstract

Background: Acute gastroenteritis (AGE) is the most common pediatric illness, which results in significant morbidity in children and it's associated with electrolyte disturbance that some of them can be dangerous.

Materials and methods: A prospective cross-sectional study of 473 children with gastroenteritis that admitted in children medical hospital emergency ward. They were treated for gastroenteritis such as oral rehydration therapy, anti-emetics and probiotics and fluid intravenous treatment. Electrolytes and urea, creatinine of all patients were checked and recorded in the data form.

Results : A total of 437 children interred in this study. Of these, 243 (51%) were males and 231 (49%) were females.4.4% of patients had mild dehydration and 78.7% of these had moderate dehydration and 20.8% of child had severe dehydration. Renge of serum Na was 116-156 mmol/l and mean 136.61 \pm 8.85. Level of serum potassium was 3-6 mmol/l with mean 4.2 \pm 0.64. According to this study prevalence of sodium disturbance was 41.6 percent in the studied group. (4% severe hyponatremia with serum Na<120 meq/L and 23.6% with serum Na 120 meq/L to 135 meq/L and 14% hypernatremia with serum Na>145 meq/L). There was 17.2% potassium disturbance in our studied group, 13% hypokalemia (serum K<3.5 mmol/L) 3.7% hyperkalemia (serum K>5.5). In conclusion, electrolyte disturbances are very common in children with acute diarrhea disease. The degree of dehydration and age less than 12 months appear to be good predictors of the occurrence of, electrolyte disturbances. Early diagnosis and management prevent of complication.

Biography:

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Publication of speakers:

- 1. Mastaneh Moghtaderi: BK nephropathy in renal transplant patient with epididymo-orchitis
- 2. Year : 2018 May.
- 3. Mastaneh Moghtaderi: Evaluation of children with undessendent testes whom were referred to children medical center in 5 years. Year : 2017