Serum Sodium Levels in Children with Lung Infections

Dear Editor,

I read with interest the article by Dr. Yılmaz et al. (1) entitled “Serum Sodium Levels in Children with Lung Infections”.

I would like to draw attention to the following points related to the article:

Hyponatremia is common in children admitted for lower respiratory tract infection (LRTI) (2). The degree of hyponatremia is correlated with the severity of pneumonia. The mechanism of hyponatremia in pneumonia is not clear. However, the syndrome of inappropriate antidiuretic hormone secretion (SIADH) is thought to play a significant role in patients with pneumonia. The presence of hyponatremia has significant association with fever, increased acute-phase reactants, need for hospitalization, mortality, length of hospital stay (LOS), need for pediatric intensive care unit (PICU) admission, length of PICU stay, need for noninvasive/invasive mechanical ventilation, duration of noninvasive/invasive mechanical ventilation, type of radiological pattern and treatment costs (3, 4). In this study, the authors evaluated serum sodium level in patients admitted to the hospital with LRTI. They also assessed the association between serum sodium and acute-phase reactants (C-reactive protein, white blood cell, absolute neutrophil count). Hyponatremia was found 18.2% of the patients. The negative and statistically significant correlations were determined between serum sodium levels and acute-phase reactants. The acute-phase reactants were higher in hyponatremic patients than normonatremic patients (1). These results are similar previous reports (2, 5). In our opinion, if the authors evaluated some important parameters in pneumonia, the impact of the study would increase. These parameters are need for hospitalization, mortality, length of hospital stay (LOS), need for PICU admission, length of PICU stay, need for noninvasive/invasive mechanical ventilation, duration of noninvasive/invasive mechanical ventilation, type of radiological pattern and treatment costs. Unfortunately, the authors didn’t mention these parameters.

In conclusion, this interesting study showed us hyponatremia associated with high acute-phase reactant levels. But this is only visible face of the iceberg. We need deeper analysis for a deeper knowledge.

Best regards.

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References