SUMMARY

Community-acquired pneumonia remains a common and serious illness despite the availability of new and potent antibiotics and effective vaccines. It is, moreover, one of the main causes of death in young children, especially in developing countries, accounting for approximately 2 million deaths, 20% of all deaths in children. Our understanding of community-acquired pneumonia is rapidly expanding and our ability to prevent and treat the disease has improved in recent years.

Hyponatremia is one of the most common electrolyte disturbances and easy to diagnosis and rarely dangerous, but sometimes its origin may be difficult to settle, and inappropriate fluid therapy may lead to complications. Hyponatremia may result from free water retention, sodium losses or a shift of water from the intracellular to the extracellural compartment or correspondingly, a shift of sodium from the extracellular to the intracellular compartment.

Hence, the aim of this study was to evaluate serum sodium alteration in the same study group, with special refrence to the occurnce of hypo- and hypernatremia, and the relationship between serum sodium, Hb, plasma glucose, temperature, WBCs count, neutrophils count, CRP, ESR, platelets count, serum creatinine and BUN.

This study was conducted on Fifty patients diagnosed as CAP in pediatric department in Benha University Hospital.

Summers of patient and methods:

- Most of our cases had hyponatremia during the course of illness of CAP.
- There was no correlation between serum glucose and hyponatremia in our cases of CAP.
- Hyponatrmia had a significant association with fever in CAP.
- Hyponatremia had a significant association with increased WBC count in CAP.
- Hyponatremia had a significant association with increased neutrophils in CAP.
- Hyponatremia had a no significant association with increased ESR in CAP.
- Hyponatremia had a no significant association with increased serum creatinine in CAP.
- Hyponatremia had a no significant association with increased hemoglobin in CAP..
- Hyponatremia had a significant association with increased serum osmolality in CAP.
- Hyponatremia had a significant association with increased duration of hospital admission in CAP.