

PP_P004**THE PREVALENCE OF HYPOPHOSPHATEMIA AND ITS ASSOCIATED RISK FACTORS IN DIABETIC KETOACIDOSIS PATIENTS**

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INTRODUCTION

DKA is a serious complication of DM. It causes multiple electrolyte imbalances. Hypophosphatemia is one of the unrecognized complications. The study of DKA with hypophosphatemia is scarce as moderate hypophosphatemia is harmless to patients, however, severe hypophosphatemia causes significant complications. We aimed to study the prevalence of hypophosphatemia and its associated risk factors among DKA pediatric patients.

METHODOLOGY

We recruited 65 patients aged 7 months to 18 years old, admitted to HUSM for DKA. We studied their socio-demographics, past medical history, summary of current hospital admission, and physical examination, and analyzed their biochemical data. DKA was diagnosed based on the criteria by ISPAD. Multiple logistic regression models were used to examine the association between variables and DKA.

RESULT

The prevalence of hypophosphatemia in DKA was highest on day 1 of admission with 70.8% with a mean age of 11 years old on presentation. Multiple logistic regression analysis showed plasma bicarbonate at day 3 [adjusted odds ratio (OR) 1.2, with p-value of 0.027] and baseline hemoglobin [adjusted OR 0.62, with p-value 0.009] were the significant factors of hypophosphatemia associated with DKA pediatric patients.

CONCLUSION

The prevalence of hypophosphatemia in DKA pediatric patients admitted to our center was highest on day 1 of admission. Risk factors associated with hypophosphatemia were family history of DM, DKA severity, heart rate, duration and percentage of fluid correction, urine ketone, blood gas pH on admission, and plasma bicarbonate on day 3, baseline hemoglobin, serum calcium, and albumin. However, plasma bicarbonate on day 3 and baseline Hb were the only significant risk factors of hypophosphatemia in DKA patients.