Letter to the Editor: Clinical and Biochemical Characteristics of Elderly Patients With Hyperglycemic Emergency State at a Single Institution

Diabetic ketoacidosis (DKA) and hyperglycemic hyperosmolar states (HHS) are the most serious complications arising among patients with type 1 or type 2 diabetes mellitus. DKA and HHS are associated with substantial morbidity and mortality. Moreover, the associated mortality rates have increased recently, especially in elderly patients. Therefore, early diagnosis and treatment are crucial for complete recovery of the patients.

Shin et al. reported the clinical and biochemical characteristics of elderly patients with a hyperglycemic emergency state at a single institution. The authors stratified 31 elderly subjects who were admitted to the hospital with a hyperglycemic emergency state into three groups: DKA, DKA combined with HHS (DKA+HHS), and HHS, and compared the clinical and biochemical characteristics among these 3 groups.

Although the authors tried to categorize hyperglycemic crises among the 3 groups using several biochemical parameters, the stratification and characteristics of the group with DKA+HHS were slightly confusing. DKA could present in various degrees from a mild to a severe form. In cases with a mild form of DKA, arterial pH and bicarbonate levels could have various ranges. Therefore, it is unclear how to distinguish DKA with HHS from mild forms of DKA. Moreover, the diagnosis of DKA is fundamentally based on acid-base disturbances. Therefore, the authors should provide information about the anion gap in each group and describe pH as ranges, not as a mean (standard deviation).

In addition, the clinical importance of hyperglycemic crises in the elderly is that this condition is directly associated with increased mortality. Therefore, it will be very informative if any clinical or biochemical parameters that show significant associations with mortality in these patients are analyzed in a future study.

Conflicts of Interest Disclosures: The researcher claims no conflicts of interest.

REFERENCES