Clinical Features and Results of Elderly Patients with Hyperkalemia in the Emergency Department

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Abstract

Background and Objective: The elderly population is prone to electrolyte disorders such as potassium imbalance due to physiological changes. Rapid recognition of these patients in the emergency department (ED) and detection of risk factors are important as they prevent mortality and morbidity. In this study, clinical results and risk factors of elderly patients who have been diagnosed with hyperkalemia at the ED were investigated.

Methods: This retrospective study was carried out with patients who applied to the Department of Emergency Medicine within one year. The study included patients 65 years of age and older with blood potassium levels above 5.5 mEq/L. The control group consisted of patients over 65

years of age with normal blood potassium levels. The laboratory parameters and clinical characteristics of the patients were recorded in the study form.

Results: Of the patients included in the study, 186 (51.1%) were male and 178 (48.9%) were female. Chronic kidney disease (CKD), heart failure (HF) and acute kidney injury (AKI) were significantly higher in the patient groups. The use of non-steroid anti-inflammatory drugs (NSAIDs) and spironolactone was statistically significant in the patient group. The independent risk factors for hyperkalemia were CKD (Odds Ratio [OR]: 16,377), AKI (OR: 11,261) and spironolactone use (OR:5.845), respectively. Conclusion: In elderly patients admitted to the

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emergency department, chronic kidney disease, acute kidney injury, heart failure, spironolactone use and the presence of multiple comorbid diseases increase the risk of hyperkalemia. Therefore, early diagnosis and implementation of treatment strategies for hyperkalemia in these patients is critical to prevent potential cardiac complications.

Keywords: Emergency department; hyperkalemia; elderly patient