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## Study on the relationship between potassium/sodium levels and antihypertensive diuretic doses in hypertensive patients monitoring by cardiology clinics

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In this study, the relationship between the alteration of electrolyte, especially potassium/sodium levels and the dose of diuretic antihypertensive drugs which were started to use in the hypertensive patients and they were followed and evaluated by cardiology clinics. Maintaining the electrolyte level is important for the healthy functioning of the cardiovascular system. Statistical analysis of the clinical data was performed by SPSS 11.5 software. P value of  $<0.05$  were considered statistically significant. The age scale of 51 patients (27 female, 24 male) participated in the study was 29 and 77 (calculated  $53.67\% \pm 11.2$ ). The percentage of patients with  $\geq 1$  year is 29.4%, whereas the percentage of the patients with hypertension for a period  $< 1$  year is 70.6%. During the monitoring, 52.8% of patients had taken ACEI%+diuretic, 31.4% had taken ARB+diuretic, 4% had taken the combined calcium channel blocker and 2% had taken combined beta-blockers therapy. Whether the effect depends on the dose of diuretic used in the treatment was examined and compared, K value has showed a tendency of fall close to the border area, in patients taking 25 mg hydrochlorothiazide. However, no significant difference has been determined ( $p=0.081$ ). In the patients, even though there was a slope of hypokalemia with rising the dose of HCTZ, this has not reached statistically the significant value. Resulting from the findings, antihypertensive combinations including diuretics could be used safely in a short period of treatment. It should still be considered that the electrolyte imbalance may occur with increasing doses of diuretics. This is important and should be taken into the account in terms of treatment safety.

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