Objective: In PARADIGM-HF study, Sacubitril/valsartan treatment has been shown to improve mortality and quality of life, as well as a reduction in sudden cardiac death (SCD) due to fatal arrhythmias. Frontal plane QRS-T \(f(QRS-T)\) angle is a novel marker of myocardial repolarization, and an increased \(f(QRS-T)\) angle is associated with adverse cardiac outcomes. We aimed to examine the effect of sacubitril/valsartan treatment on \(f(QRS-T)\) angle and cardiac repolarization parameters in order to investigate its potential antiarrhythmic effects.

Methods: The study included 43 patients who started Sacubitril/valsartan therapy due to heart failure. The ECG was evaluated before the treatment and on the 90th day of the treatment. ECG repolarization parameters were compared before and after treatment.

Results: A statistically significant decrease has been detected in, \(T_p-e/QT\) ratio \((p=0.001)\), \(T_p-e/corrected\) QT ratio \((p =0.001)\), \(T_p-e\) interval \((p =0.005)\) and \(f(QRS-T)\) angle \((p <0.001)\).

Conclusion: In our study, Sacubitril/valsartan treatment was found to be associated with an improvement in cardiac repolarization parameters. One of the mechanisms of sacubitril/valsartan treatment to prevent SCD may be that it causes improvement in cardiac repolarization. However, our hypothesis should be supported by larger and more comprehensive studies.

Key words: Sacubitril/valsartan, frontal plane QRS-T angle, cardiac repolarization.