SGLT-2 Inhibitors Beneficial Effects on Ventricular Repolarization May Be Protective against Atrial Fibrillation Occurrence

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Dear Editor,

In their interesting retrospective analysis, Duran and colleagues demonstrate for the first time in literature the beneficial effects of sodium-glucose co-transporter 2 (SGLT-2) inhibitors on ventricular repolarization indices in patients with type 2 diabetes mellitus, compared to other oral antidiabetic agents.1

As we know, patients with diabetes mellitus feature an increased risk for atrial fibrillation (AF), equal to 30%, compared to non-diabetic subjects.2 The latter complication correlates inevitably with significant cardiovascular morbidity and mortality. In addition, according to a recent meta-analysis, prolongation of the corrected QT interval (QTc) by 10-ms increases the corresponding risk for AF by 17%.3 Overall, electrocardiographic indices of ventricular repolarization seem to be highly predictive of the future occurrence of AF in general population.4 SGLT-2 inhibitors have been associated with a significant decrease in the risk for AF, besides their established, well-known cardiovascular benefits, mainly seen in patients with concomitant heart failure.5 Thus, besides the significant results demonstrated by Duran and colleagues, one could hypothesize that the observed benefits of this drug class on ventricular repolarization could have direct implications in clinical practice, unraveling further cardiovascular benefits that might influence therapeutic decisions. Prospective studies will elucidate this reasonable hypothesis.

CONFLICT OF INTEREST

The author declare no conflict of interest.

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REFERENCES