Young Investigator Award

Topic: 4. Arrhythmias

Prevalence of Appropriate Non-Antiarrhythmic Pharmacotherapy in Atrial Fibrillation Patients with Rhythm Control Strategy

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Keywords: atrial fibrillation; non-antiarrhythmic pharmacotherapy**Introduction and Objectives**

Guidelines of the European Society of Cardiology (ESC) from 2016 recommend pre-treatment with non-antiarrhythmic drugs (namely ACE-Is or ARBs) in patients with recurrent atrial fibrillation (AF), in whom rhythm control strategy is considered.¹ This recommendation is based on possible antiarrhythmic effects of these drugs. Little is known of the prevalence of this guideline-based treatment in the clinical practice.

Materials and Methods

The study included AF patients hospitalized in a tertiary cardiology department, in whom an invasive rhythm control strategy (ablation or electrical cardioversion) was taken. All patients included in the study hospitalized with a primary diagnosis of AF between 2011 and 2014. Prospective data on the drugs prescribed on discharge was collected in all patients.

Results

The study population consisted of 267 patients with primary diagnosis of AF in whom rhythm control strategy was considered. The mean age

of the study population was 57.6±10.1 years, and 174 (65.2 %) patients were male. Out of the study population, 194 (72.7 %) patients had arterial hypertension, and 22 (8.2 %) had a history of myocardial infarction. According to the discharge records, 164 (61.4 %) patients were prescribed renin-angiotensin-aldosterone system blocking medication. Out of this group, 127 (47.6 %) patients were prescribed ACE-I and 37 (13.9 %) received ARB. When we compared patients with and without arterial hypertension, we saw that patients with arterial hypertension were more likely to receive renin-angiotensin-aldosterone system blocking medication (76.8 % vs. 20.5 %; $p < 0.0001$), ACE-I (59.8 % vs. 15.1 %; $p < 0.0001$), and ARB (17.0 % vs. 5.5 %; $p = 0.009$).

Conclusions

Non-antiarrhythmic drugs (ACE-Is or ARBs) possible antiarrhythmic effects are largely underutilized in patients with recurrent atrial fibrillation (AF), in whom rhythm control strategy is considered. Main reason for ACE-I/ARB prescription in this group is probably arterial hypertension. More effort should be put on informing physicians on possible benefits from ACE-I/ARB in non-hypertensive patients with AF. ■

1. Kirchhof P, Benussi S, Kotecha D, et al. 2016 ESC Guidelines for the management of atrial fibrillation developed in collaboration with EACTS. *Eur Heart J* 2016;**37**:2893-2962.