Topic: 4. Arrhythmias**Choice of Anticoagulation Therapy in Atrial Patients with Rate Control and Rhythm Control Strategy - Data from a Multicenter Real-life Registry**Anna E Platek,¹ Anna Hryniewicz-Szymanska,² Anna Rys,¹ Karolina Semczuk,¹ Filip M Szymanski,¹ Krzysztof J Filipiak¹*1. 1st Department of Cardiology - Medical University of Warsaw, Poland., 2. Department of Cardiology, Hypertension and Internal Diseases - Medical University of Warsaw, Poland***Keywords:** atrial fibrillation; anticoagulation**Introduction and Objectives**

Atrial fibrillation (AF) patients can be managed with rate control and rhythm control strategies. Both seem to be equally safe and effective, and the decision should be made depending on patients and doctors' preferences.¹ The aim of the study was to compare patients with persistent AF in whom rhythm control strategy is chosen to those with rate control, in terms of the choice of anticoagulation therapy.

Materials and Methods

We analyzed data from a registry of continuous AF patients hospitalized with a primary diagnosis of AF between 2011 and 2014. In all cases, we collected prospective data on medical history, cardiovascular and thromboembolic risk factors and on discharge anticoagulation treatment.

Results

The registry included 1205 records of hospitalization with AF. Out of this group 447 patients with primary diagnosis of AF were hospitalized at least one time in the given period. Baseline characteristics showed that the mean age of the population was 73.1±13.2 years, and their mean body mass index (BMI) was 29.2±6.4 kg/m². 211 (47.2 %) patients were male. 289 (64.6 %) patients were in the rhythm control strategy

group. Compared to the rate control group, patients in whom the rhythm control strategy was chosen were younger (71.9±12.1 vs. 75.3±10.4; $p = 0.005$). There were no differences in terms of sex, and hypertension or diabetes mellitus prevalence. When we analyzed use of anticoagulation treatment, it was shown that in the general population 325 (72.7 %) were prescribed oral anticoagulant on discharge, out of which 287 (64.2 %) were prescribed vitamin K antagonist (VKA), 38 (8.5 %) were prescribed non-vitamin K oral anticoagulant (NOAC). 128 (28.6 %) patients were prescribed aspirin. When we compared patients with rhythm control vs. rate control strategy, we showed that OAC were used in 67.5 % vs. 82.3 % patients ($p < 0.0001$), VKA in 57.8 % vs. 75.9 % ($p = < 0.0001$), NOAC in 9.7 % vs. 6.3 % ($p = 0.15$) and aspirin in 33.2 % vs. 20.3 % ($p = 0.002$).

Conclusions

In AF patients in whom the rhythm control strategy OAC are used less often than in patients with rate control strategy. These differences are probably related to a different distribution of comorbidities and therefore other profile of thromboembolic risk. Moreover, underutilization of NOACs may be related to a period in which the study was conducted. ■

1. Knecht S, O'Neill MD, Verbeet T. Rhythm control versus rate control for atrial fibrillation. *N Engl J Med.* 2008;**359**(14):1522.