1. Abstract Title:

Real-world three-year outcome in patients with non-valvular atrial fibrillation in the era of treatment with direct oral anti-coagulants: the ASSAF-K registry

2. Abstract Category (from attached list):

08 Arrhythmias and Clinical EP: Supraventricular/Ventricular Arrhythmias

3. Keywords (between 1 and 3 from attached list):

Epidemiology
Atrial fibrillation
Anticoagulants

4. Abstract Body (maximum 1900 characters, not including spaces):

Background
Recently anticoagulant therapy with direct oral anticoagulants (DOACs) for atrial fibrillation (Af) has been dramatically changed. However, the real-world status and outcome of the patients with Af were not clarified.

Methods
The ASSAF-K, a prospective, multi-center, observational study, was conducted from 2013. The primary endpoints were to clarify epidemiologic characteristics, status of treatment with anticoagulants, three-year outcomes, and adverse events.

Results
The analyzed number was 3839 enrolled in 105 institutes (26 hospitals and 79 clinics). Mean age was 72.7±10.1 years, proportion of men was 65.4%. CHADS2-Vasc score and HAS-BLEED were 3.00±1.59, 2.23±1.06, respectively. The risk factors of composite endpoint (all-cause death, severe adverse events, cerebral hemorrhage and stroke) were age (hazard ratio [HR] 1.062; 95% confidence interval [CI], 1.044-1.080, history of heart failure (HR: 1.274; 95% CI, 1.014-1.601), stroke (HR: 1.621; 95% CI 1.277-2.058). Three year-event-free-rate in the DOACs, warfarin, and without anti-coagulants were 91.5%, 87.3%, and 86.6%, respectively. The event rate in the DOACs was significantly lower than that in warfarin (P=0.002) (figure). Severe adverse events were significantly (P=0.016) lower in DOACs than those in warfarin.

Conclusions
The ASSAF-K registry have demonstrated the real-world Af patient characteristics and three-year outcome, suggesting that treatment with DOACs for Af patients was safe and beneficial.

(1292 words)
5. Clinical Implications (complete the following sentence):
My study will help enable cardiovascular clinicians to manage effectively and safely the patients with atrial fibrillation with direct oral anticoagulants.

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