COMBINATION OF CHADS2 INDEX AND LEFT VENTRICULAR EJECTION FRACTION IDENTIFY PATIENTS WITH ATRIAL FIBRILLATION AND HIGHER RISK OF CARDIOVASCULAR EVENTS?

ACC Poster Contributions
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Background: Background. Risk stratification in patients with non-valvular atrial fibrillation (NVAF) is mainly based on different clinical markers, the CHADS2 scoring system of thromboembolism risk being the most widely used. The influence of left ventricular ejection fraction (LVEF) has not been yet determined and could help to identify patients with CHADS2 score of 1 at higher risk of cardiovascular (CV) events. We sought to investigate whether the consideration of LVEF (≥ 50% versus < 50%) could better predict the occurrence of a composite CV endpoint including death, stroke, heart failure (HF) and acute coronary syndrome (ACS).

Methods: Among 137 AF patients with a CHADS2 score = 1, we determined the rate of composite CV events in 102 patients with LVEF ≥ 50% compared to 35 patients with LVEF < 50% at a mean follow-up of 1.9 ± 1.5 year.

Results: The mean age was 68 ± 11 years, 75 (55%) males. At discharge, treatment included warfarin in 101 (74%), aspirin in 38 (28%) and anti-arrhythmic drugs including amiodarone in 126 (92%). CV events at follow-up were: death in 21 (15%) including CV death in 9 (7%), stroke in 3 (2%), HF in 12 (9%) and ACS in 2 (1.4%). The composite CV endpoint, stroke, death, HF and ACS was observed in 29 (21%). As shown in the Kaplan Meier curves (figure) patients with CHADS2 risk score = 1 and LVEF < 50% exhibited a higher risk of CV events (Log Rank p= 0.003).

Conclusions: Patients with a CHADS2 score = 1 and LVEF < 50 % are at higher of CV events compared to patients with LVEF > 50 %.