Abstract: P3345

Stroke and death in atrial fibrillation patients newly treated by oral anticoagulants in France: a national cohort study 2012-2016

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Topic(s):
Cardiovascular Epidemiology

Citation:

Introduction of new oral anticoagulants (OAC) lead to an increase in atrial fibrillation (AF) patients treated with those drugs. Few epidemiological data on outcomes are available in France or abroad in this population. There is an important need to follow up patients newly diagnosed for AF and treated by OAC, and estimate stroke and mortality outcomes at national level in unselected patients’ population. The French "Système national des données de santé" (SNDS) gathered enough medical information on the overall French population, with complete follow-up until patient’s death.

Purpose

The objective of this study was to analyze stroke and death outcomes and their determinants in a cohort of AF patients newly treated by OAC in France between 2012 and 2016.

Methods

All AF patients aged over 20 years old, residing in France, and newly treated by OAC between 2012 and 2016 were included in a cohort. The date of OAC delivery was considered as the inclusion date. Patients were followed till 31 of December 2017. Main outcomes studied were the first hospitalisation for stroke or death. We used a Fine and Gray regression model to estimate subdistribution hazard ratio (SHR) for stroke. Cox regression models were used to compute cause-specific hazard ratios (CSHR) for stroke and death respectively. Analyses were adjusted for main confounders.

Results

The total number of patients enrolled in the study for the period 2012-2016 was 662,298. Mean age at inclusion was 74.9 years old. Women accounted for 47.8% of the study population. Globally, 3.8% of patients experienced stroke after initiation of OAC and 13.9% of patients died over the study period with 1.1% of death occurring after a stroke. The median follow-up for stroke or death events was 1094 days, 1208 days for stroke and 1123 days for death. Incidence rates of stroke or death reached 53.3[53.0-53.6] per 1,000 person-year and, 11.3[11.2-11.5] and 44.0[43.7-44.3] for stroke and death respectively. Advanced age, history of stroke, acute coronary syndrome (ACS), chronic kidney disease (CKD), treated hypertension, diabetes and to be included during the first year of the study period were associated with an increase in the subdistribution hazard of stroke. Significant differences were found by age group such as an increase in SHR for stroke in women aged over 85 years compared to men of the same age. Cause-specific analyzes gave similar results for stroke. History of heart failure, ACS, CKD, hemorrhages, treated hypertension and diabetes were associated with increased hazard of death. On the contrary, female sex was associated with a significant decrease in the hazard of death only.

Conclusion

Stroke incidence and mortality rate in AF patients newly treated by OAC were high. Several factors were associated with increased hazard of stroke and death but differed according to patient’s age.
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