

Oral Anticoagulants in Atrial Fibrillation Patients with Recent Stroke who are Dependent on the Daily Help of Others

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Abstract

Background and purpose: Data on the effectiveness and safety of direct oral anticoagulants (DOACs) versus Vitamin K antagonists (VKAs) in patients with stroke attributable to atrial fibrillation (AF) who were dependent on the daily help of others at hospital discharge are scarce.

Methods: Based on prospectively obtained data from the observational Novel-Oral-Anticoagulants-in-Ischemic-Stroke-Patients-longterm registry (NOACISP-LONGTERM), from Basel, Switzerland, we compared the occurrence of the primary outcome – the composite of recurrent ischemic stroke, major bleeding and all-cause death – among consecutive AF-stroke patients treated with either VKAs or DOACs, stratified in patients either dependent (defined as modified Rankin Scale 3-5) or independent at discharge, and their interaction. We used simple, adjusted and weighted cox proportional hazards regression to account for potential confounders.

Results: We analyzed 801 patients (median age 80 years, 46% female), of whom 391 (49%) were dependent at discharge and 680 (85%) received DOACs. Over a total follow-up of 1'216 patient-years, DOAC- compared to VKA-treated patients had a lower hazard for the composite outcome (0.58, 95% CI [0.42-0.81]), as did independent compared to dependent patients (0.54, 95% CI [0.40-0.71]). There was no evidence for interaction between dependency and anticoagulant type on the hazard for the composite outcome in any of the models ($p_{\text{interaction}} = 0.212, 0.284$ and 0.163 in the simple, adjusted and weighted models, respectively). Consistent with the primary analysis, the favorable profile of the DOACs compared to VKAs was maintained in dependent patients in secondary analyses focusing on the individual components of the composite outcome.

Conclusion: The benefits of DOACs in AF patients with a recent stroke were maintained among patients that were dependent on the help of others at discharge.

Clinical Trial Registration: NCT03826927