

Editorial



What Is a Balanced Way of Anticoagulation for Efficacy and Safety in High-Risk Elderly Patients With Atrial Fibrillation?

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Conflict of Interest

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► See the article “Optimal Dose of Edoxaban for Very Elderly Atrial Fibrillation Patients at High Risk of Bleeding: The LEDIOS Registry” in volume 54 on page 398.

The burden of atrial fibrillation (AF) is anticipated to grow significantly over the next decade, coinciding with an aging population.^{1,2)} This increase in age, along with higher levels of comorbidity and polypharmacy, will complicate the management of older adults with AF.³⁻⁵⁾ Advanced age is associated with a heightened risk of both thromboembolism and bleeding in AF patients.⁶⁾ However, oral anticoagulants are often underutilized or underdosed in elderly patients, especially those with additional bleeding risk factors. In such patients with high bleeding risk, the Edoxaban Low-Dose for Elder Care Atrial Fibrillation Patients (ELDERCARE-AF) trial demonstrated that a very low dose of edoxaban (15 mg/day) was more effective than a placebo in preventing stroke/systemic embolism without significantly raising the risk of severe bleeding.⁷⁾ However, there is limited data on the efficacy and safety of on-label use of direct oral anticoagulants (DOACs) for these patients.

Underdosing of DOACs has been linked to a higher risk of stroke without a clear safety benefit in terms of bleeding risk.⁸⁾ Chan et al.⁹⁾ found that using very low dose DOACs was associated with a higher risk of thrombosis and death compared to reduced dose DOACs in high-risk elderly AF patients with increased bleeding risk, based on Taiwanese nationwide cohort data. This suggests that stroke prevention with a reduced dose DOAC might be more appropriate than a very low dose DOAC.

In this issue, Kim et al.¹⁰⁾ reported both bleeding and stroke risk showed a tendency to increase in very elderly patients with additional bleeding risk factors (similar to those enrolled in the ELDERCARE-AF trial) by analyzing 2,448 patients prescribed on-label reduced-dose edoxaban (30 mg) in Korea. The study showed a stroke incidence rate of 1.72% per year and a bleeding incidence rate of 1.95% per year in ELDERCARE-like patients taking 30 mg edoxaban, which were comparable to or lower than those taking 15 mg edoxaban in the ELDERCARE-AF trial (stroke/systemic embolism: 2.3% per year, major bleeding: 3.3% per year).⁷⁾ Additionally, outcomes did not differ among patients over 80 years old according to each bleeding risk factor, suggesting that the on-label reduced dose of DOAC may be suitable for elderly patients at high bleeding risk, consistent with Chan et al.'s findings.⁹⁾

Data Sharing Statement

The data generated in this study is available from the corresponding author upon reasonable request.

The contents of the report are the author's own views and do not necessarily reflect the views of the *Korean Circulation Journal*.

Due to the non-interventional, single-arm design of the study, it is not possible to draw definitive conclusions about the comparative efficacy and safety between edoxaban 30 and 15 mg. Further studies are needed to investigate the optimal DOAC dose for very elderly patients with high bleeding risk.

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