Study reports on switch to newer anticoagulants in frail elderly with atrial fibrillation

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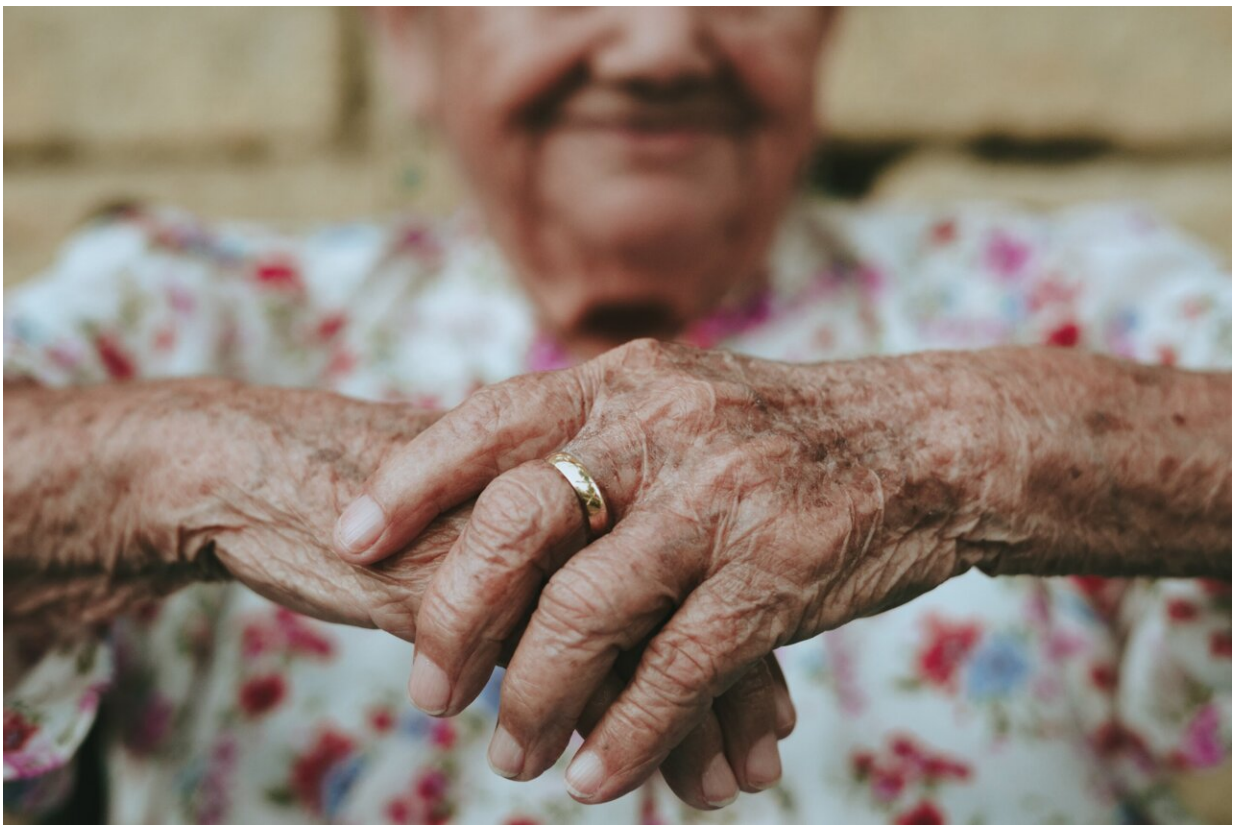

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Switching vitamin K antagonist (VKA) treatment to a non-vitamin K antagonist oral anticoagulant (NOAC) in frail elderly patients with atrial

fibrillation is associated with more bleeding complications compared to continuing VKA treatment. That's the finding of late breaking research presented in a Hot Line session August 27 at ESC Congress 2023.

In newly diagnosed patients with atrial fibrillation, NOACs are preferred over VKAs for the prevention of stroke. In atrial fibrillation patients already using a VKA, ESC guidelines recommend considering switching to a NOAC, especially if the time in therapeutic range is not well-controlled despite good drug adherence. However, there are limited data on the comparison between VKAs and NOACs in frail elderly patients with atrial fibrillation and it is unclear whether those currently managed with VKAs should be switched to NOACs.

The FRAIL-AF trial investigated whether switching VKA treatment to NOAC treatment was superior in terms of major and/or clinically relevant non-major bleeding complications in frail elderly patients with atrial fibrillation. Patients were at least 75 years of age, had a Groningen Frailty Indicator score of 3 or higher, and were currently managed with VKAs at one of the seven participating thrombosis centers in the Netherlands. Patients with severe renal impairment (estimated glomerular filtration rate below 30 mL/min/1.73 m^2) or with valvular atrial fibrillation were excluded from randomization.

Participants were randomized in a 1:1 ratio to switch from a VKA to a NOAC or to continue a VKA. The choice of NOAC was left to the discretion of the treating physician. The follow-up duration was 12 months. The cause-specific hazard ratio (HR) was calculated for occurrence of the primary outcome which was major or clinically relevant non-major bleeding, whichever came first, accounting for death as a competing risk. Analyses followed the intention-to-treat principle and were stratified for renal function. Secondary outcomes included thromboembolic events, defined as ischemic stroke, transient ischemic attack, and/or peripheral arterial thromboembolism.

Between January 2018 and April 2022, a total of 1,330 patients were randomized. The mean age was 83 years and 38.8% were women. After 163 primary outcome events (101 in the switch arm, 62 in the continue arm), the trial was stopped for futility on advice from the Data Safety and Monitoring Board following a prespecified futility analysis. The HR for the primary outcome of major or clinically relevant non-major bleeding was 1.69 (95% confidence interval [CI] 1.23 to 2.32) for switching to a NOAC relative to continuing a VKA. The HR for thromboembolic events was 1.26 (95% CI 0.60 to 2.61).

Regarding secondary outcomes, 16 thromboembolic events occurred in the NOAC arm versus 13 in the VKA arm, yielding incidence rates of 2.6 (95% CI 1.5 to 4.3) and 2.1 (95% CI 1.1 to 3.6) per 100 patient-years, respectively.

Study author Dr. Linda Joosten of the Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht University, Utrecht, the Netherlands said, "Switching VKA treatment to a NOAC in frail elderly patients with atrial fibrillation was associated with more bleeding complications compared to continuing a VKA. This higher bleeding risk with NOACs was not offset by a lower risk of thromboembolic events."

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