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Stroke prevention: Learning from the master (and *COMMANDER*)

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Abstract

Adding rivaroxaban to standard therapy in patients with heart failure and no atrial fibrillation did not show any beneficial effect on death risk.

Reducing thrombin activation is known to be advantageous in patients with atrial fibrillation; equally important, stimulation of thrombin-related pathways has been related to adverse outcome in heart failure (HF) patients. Nevertheless, the effects of specific antithrombin therapy have not been previously tested in HF patients without atrial fibrillation.

Zannad and the other investigators of the COMMANDER HF clinical trial hypothesized that the addition of low-dose (2.5 mg twice daily) rivaroxaban to standard antiplatelet therapy could improve the outcome of patients with ischemic HF because this drug reduces thrombin generation. Patients who had at least a 3-month history of HF, coronary artery disease, and an ejection fraction of ≤ 40%, and who had been recently treated for an episode of worsening HF, were recruited and assigned to rivaroxaban treatment (2507 subjects) or placebo (2515 subjects). Over a median follow-up of ~21 months, rivaroxaban was not found to have a benefit with regard to the primary outcome, defined as the composite of death from any cause, myocardial infarction, and stroke, suggesting that thrombin-mediated events are not the main driver of cardiovascular events leading to death, at least in patients with recent HF hospitalization. However, when considering the risk of stroke alone, the authors reported a significant beneficial effect of rivaroxaban compared with placebo.

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Highlighted Article

Zannad F, Anker SD, Byra WM, Cleland JGF, Fu M, Gheorghiade M, Lam CSP, Mehra MR, Neaton JD, Nessel CC, Spiro TE, van Veldhuisen DJ, Greenberg B, Rivaroxaban in patients with heart failure, sinus rhythm, and coronary disease. N. Engl. J. Med 10.1056/NEJMoa1808848 (2018).