Death rates and causes in anticoagulated atrial fibrillation patients: a populationbased study

J Cardiovasc Med (Hagerstown). 2020 Jun;21(6):415-419. doi: 10.2459/ JCM. 000000000000987 Denas G, Fedeli U, Gennaro N, Ferroni E, Corti MC, Pengo V

Aims: To compare mortality between anticoagulated atrial fibrillation patients and general population and among anticoagulation specific categories [direct oral anticoagulants (DOACs) vs. vitamin K antagonists(VKA)].

Methods: This was a population-based study including all residents in the Veneto Region aged 18 years or older. Administrative claims from July 2013 to September 2017 were used to identify anticoagulation-naïve atrial fibrillation patients. Propensity score matching was employed to compare patients on new and old anticoagulants.

Results: Overall, 17 225 patients on direct anticoagulants were 1 : 1 matched to patients on VKA (49% males, median age 77 years). Mortality was higher with respect to the general population by 22 and 39% among patients on direct anticoagulants and VKA, respectively. Mortality from intracranial hemorrhage in the direct anticoagulant group was similar to that in the general population [standardized mortality ratio: 1.06, 95% confidence intervals (CI) 0.76-1.48], whereas it almost doubled in VKA group (1.92, 95% CI 1.49-2.46). When directly compared with the VKA cohort, the risk of death from intracranial hemorrhage halved with DOACs (hazard ratio 0.56, 95% CI 0.37-0.84).

Conclusion: The mortality rate of anticoagulated atrial fibrillation patients is increased with respect to the general population, particularly among patients treated with VKAs. The mortality rate for intracranial bleeding with DOACs is similar to that observed in the general population.