



Atrial fibrillation and cause of death, sex differences in mortality, and anticoagulation treatment in low-risk patient

av

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Abstract

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Background: Atrial fibrillation (AF) is the most common arrhythmia but information on cause of death in patients with AF is sparse, and whether individuals at low risk of cerebral infarction (CVL) should receive anticoagulant medication is controversial. Studies of sex differences with respect to mortality risk have shown conflicting results.

Methods: Data were obtained from Swedish National Registers. In Study I, there were 272 186 AF patients and matched controls and in Studies II and III, 9519 AF patients and no other diagnosis and matched controls. Study IV compared treatment with warfarin to no treatment in 48 433 patients with AF. Hazard ratio (HR) was calculated with 95% confidence intervals and outcome rates as number per 1000 person-years.

Results: Ischemic heart disease (IHD) was the most common underlying cause of death and was present in 40.2% of AF patients at a HR of 1.7 (1.4-2.1). CVL/stroke was a cause of death in 13.1%, HR 2.7 (1.8-4.0). Among underlying and contributing causes of death, the most common diagnoses were IHD in 43.5%, HR 1.7 (1.4-2.0) and heart failure in 33.1%, HR 2.9 (2.2-3.7). The HRs for mortality in females with AF in age categories ≤65, 65-74, and 75-85 were 2.15, 1.72, and 1.44, and for males 1.76, 1.36, and 1.24. The rates of mortality in females with AF in age categories 55-64, 65-74, and 75-85 were 6.2, 20.7, and 57.3, and for males 8.5, 27.3, and 64.5. In patients 65-74 years, females with a CHA₂DS₂-VASc score of 2, and males with a score of 1 receiving warfarin treatment showed a significantly reduced risk of cerebral infarction/stroke, HR 0.46 (0.25-0.83) for females and for males, HR 0.39 (0.21-0.73).

Conclusions: Most common causes of death in AF patients were CVL/stroke, heart failure, and IHD. HR of mortality in patients with AF was higher in females than in males but absolute risk was higher in males with AF compared to females with AF. Anticoagulant therapy was beneficial in patients ≥65 years, regardless of the CHA₂DS₂-VASc score.

Keywords: Atrial fibrillation; Cerebral infarction; Anticoagulation; Cause of death; Mortality risk; Sex differences; CHA₂DS₂-VASc score

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