How to Improve Clinical Outcomes in Women with Atrial Fibrillation

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To the editor

Anticoagulation is a standard therapeutic approach for patients with atrial fibrillation (AF), requiring careful consideration of the balance between antithrombotic efficacy and the risk of hemorrhagic complications. The authors examined the rate of anticoagulant prescriptions among patients admitted to the emergency department with symptomatic AF, revealing a higher prevalence of non-prescription in women compared to men.[1] This observation raises several important concerns.

The median CHA_2DS_2-VASc score was reported as 2 in men and 4 in women,[1] a relatively modest value. In contrast, candidates for left atrial appendage closure, typically necessitated by an elevated bleeding risk that contraindicates long-term anticoagulation, generally present with higher CHA_2DS_2-VASc scores.[2] Furthermore, recent studies suggest that patients with asymptomatic AF face higher risks of adverse events compared to those with symptomatic AF.[3] The cohort studied here may not be fully representative of contemporary AF populations.

The underlying mechanism explaining the higher age of AF onset in women compared to men remains unclear and may involve unaddressed confounding factors.[1] For example, alcohol abuse, a known risk factor for recurrent AF following catheter ablation, is reportedly more prevalent among men,[4] which could partly account for the observed differences.

Additionally, the risks of both stroke and bleeding are significantly influenced by interventions such as catheter ablation and left atrial appendage closure. It is imperative to clarify how many patients in the study underwent these procedures and whether adverse events occurred post-intervention.

Keywords

Anticoagulation; Catheter Ablation; Stroke

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Reply

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The authors appreciate the interest in our paper and the important points raised. Regarding the "*representativeness of contemporary AF populations*", we agree that our sample is not fully representative of AF populations, as we stated in the limitations of the study. Even though we performed a multicenter study with a very large sample from the largest private hospital network in Latin America, we did not include public hospitals. Moreover, the findings, such as the CHA_2DS_2VASc values (median of 2 for men and 4 for women), were similar to those of the Brazilian Cardiovascular Registry of Atrial Fibrillation (RECALL Study), whose average score was 3.2.[1]

The difference in age between men and women in the study population, as already pointed out in other studies,[2] may be associated with different pathophysiological mechanisms. As mentioned, alcohol use, a known risk factor for atrial fibrillation, may be an important factor associated with the increased incidence of tachyarrhythmia in young men.[3]

Indeed, ablation and left atrial appendage closure are interventions that can reduce the long-term risk of stroke and bleeding. However, our study did not focus on the prevalence of clinical complications associated with atrial fibrillation but rather on the appropriateness of anticoagulant therapy indication, revealing paradoxical results related to gender, with women exhibiting a higher risk yet lower prophylaxis indication. Furthermore, since there is no consensus on discontinuing antithrombotic therapy after ablation, these aspects were not included in the analysis without affecting the study's conclusions.

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