Response to Letter Regarding Article, “Atrial Fibrillation and the Risk of Ischemic Stroke—Does It Still Matter in Patients With a CHA₂DS₂-VASc Score of 0 or 1?”

Response:

We would like to thank Providência et al1 for their comments regarding our recently published article about gender difference in stroke risk among patients with atrial fibrillation (AF).2 In this study, we enrolled patients younger than 65 years and demonstrated that female gender was a risk factor of ischemic stroke. The finding provided a validation for the CHA₂DS₂-VASc scheme of assigning 1 point for female patients who have no significant underlying diseases. However, the result was different from that observed in 2 recently published studies performed in Europe,3,4 and racial difference between Asians and Europeans may be a possible explanation.

We have to clarify that results of our study should not be interpreted that AF females with a CHA₂DS₂-VASc score of 0 (only attributable to gender) should receive oral anticoagulation. When determining the strategy of stroke prevention in AF, the risk and benefit of oral anticoagulant therapies should be weighed carefully. The annual stroke rate was around 0.92% for AF females with a CHA₂DS₂-VASc score of 1 in our report, which was lower than that of life-threatening bleeding of dabigatran use in the RE-LY study (1.22%/y for dabigatran 110 mg; 1.45%/y for dabigatran 150 mg).5 Therefore, our findings may suggest that oral anticoagulants may not be necessary for AF females younger than 65 years, despite the fact that they have a CHA₂DS₂-VASc score of 1 attributable to the female gender, and it was consistent with that suggested in the focused update of the European Society of Cardiology guidelines for the management of AF.6

In the updated European Society of Cardiology guideline, female patients with gender alone as a single risk factor (still a CHA₂DS₂-VASc score of 1) would not need anticoagulation if they fulfill the criterion of age <65 and lone AF. In other words, for patients younger than 65 years without any significant comorbidity, it may not be necessary to take gender into consideration, because it would not change the decision about the use of anticoagulant agents. For patients older than 65 years, their minimal CHA₂DS₂-VASc scores are 1 and should receive oral anticoagulants regardless of the gender. Therefore, we would like to raise a question: Because the main purpose of the scoring system is to guide the strategy of stroke prevention, should we consider removing female gender (Sc) from the CHA₂DS₂-VASc scheme to simplify the algorithm of the decision process? We think the question may remain unanswered until more data about the issue of gender difference in AF are available.

In conclusion, our study demonstrated that female gender was a risk factor of ischemic stroke in AF. However, oral anticoagulants may not be necessary for AF females with a CHA₂DS₂-VASc score of 1, because the bleeding risk exceeds the benefit of risk reduction for stroke.

Disclosures

None.

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