Response to Letter by Tsivgoulis et al

Response:
We appreciate the comments of Tsivgoulis et al regarding our recent article.1 The results of our study are in line with previous findings of Tsivgoulis et al.2,3 In patients with ischemic stroke and atrial fibrillation, who have no contraindications to treatment, prevention with oral anticoagulants leads to a substantial reduction of poststroke mortality. Tsivgoulis et al found that the preventive effect of anticoagulation was even better in patients older than 75 years of age. In our analysis, independent predictors of death were identified using the Cox proportional hazard model. Age and stroke severity score were found to be important confounders as they related to both prevalence of treatment and survival. We decided to include both age and the stroke severity score as continuous variables in the analysis. We then investigated the interaction between age and treatment with oral anticoagulants. Although the tendency agrees with the results by Tsivgoulis et al, ie, that the benefit (lowering the hazard of death) of treatment with oral anticoagulants increases with age, this finding was not statistically significant. Similarly, we did not find any statistically significant interaction between treatment with oral anticoagulants and neither stroke severity nor stroke risk factors. We did not find any time-dependent effect of anticoagulation treatment on death, nor did we find any violations of the proportional hazard assumption in our analysis. This led us to conclude that the effect of anticoagulation treatment was independent of age, stroke severity, and stroke risk factors. Unfortunately, our registry does not contain data on chronic versus intermittent atrial fibrillation.

The preventive effect of anticoagulation in patients with ischemic stroke and atrial fibrillation is documented only in randomized trials on minor stroke in the younger end of the “atrial fibrillation spectrum.”4,5 While reducing stroke recurrence, these trials did not (and were not powered to) demonstrate an influence on survival as we did. In our opinion our findings together with those of Tsivgoulis et al provide good reasons to offer anticoagulation as secondary prevention of ischemic stroke regardless of age and stroke severity.

Disclosures
None.

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