Response to Letter Regarding Article, “Risk of Stroke in Chronic Heart Failure Patients Without Atrial Fibrillation: Analysis of the Controlled Rosuvastatin in Multinational Trial Heart Failure (CORONA) and the Gruppo Italiano per lo Studio della Sopravvivenza nell’Insufficienza Cardiaca-Heart Failure (GISSI-HF) Trials.”

We thank Lin and colleagues for their interest in our article.1 Their hypothesis that the seemingly paradoxical relation between lower body mass index and higher risk of stroke in patients without atrial fibrillation might be explained by leaner patients having more severe heart failure and a hemodynamic profile favoring left atrial thrombus development is plausible. However, when dichotomized into lean (<25 kg/m²) versus overweight (≥25 kg/m²) groups, lean patients did not have longer-duration heart failure or a worse distribution of New York Heart Association functional class, although they did have a higher N-terminal pro-B-type natriuretic peptide level (lean: median, 185 pmol/L [interquartile range, 76–391 pmol/L] versus overweight: 96 pmol/L [interquartile range, 41–212 pmol/L]; P<0.001) and lower left ventricular ejection fraction (mean±SD, 30±7% versus 32±7%, respectively; P<0.001).

Patients with atrial fibrillation (n=3531) did not show a clear relationship between body mass index and risk of stroke: the hazard ratio for stroke per 5-kg/m² increase in body mass index (≤30) was 0.90 (95% confidence interval, 0.70–1.14; P=0.335). The unadjusted hazard ratio for risk of stroke in overweight versus lean patients was 0.76 (95% confidence interval, 0.55–1.04; P=0.085). The hazard ratio for this comparison in patients without atrial fibrillation was 0.60 (95% confidence interval, 0.46–0.79; P<0.001). The reasons for this difference, if real, are uncertain but might include any independent effect of heart failure severity on the propensity to thrombus formation being obscured by the same (and perhaps greater) effect of atrial fibrillation.

Disclosures


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References

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