

# How to treat atrial fibrillation in patients with cardiac amyloidosis

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## To the Editor

Patients with cardiac amyloidosis have a worse prognosis if they have concomitant atrial fibrillation (AF). However, clinical outcomes after AF catheter ablation in such a cohort remain uncertain. Using a nationwide database, Ullah *et al.*<sup>1</sup> demonstrated that AF ablation in patients with cardiac amyloidosis was associated with higher in-hospital all-cause mortality and net adverse clinical events both during the index hospitalization and at 30-day follow-up as compared with background-matched heart failure patients without cardiac amyloidosis. Several concerns are raised.

The authors attempted to match baseline characteristics between the patients with cardiac amyloidosis + heart failure and those with heart failure alone.<sup>1</sup> Heart failure is commonly stratified into those with reduced ejection fraction and those with preserved ejection fraction. The diagnosis of heart failure with preserved ejection fraction can be challenging. In particular, the symptom of AF is similar to heart failure.<sup>2</sup> Thus, in their study, the patients with AF who did not have heart failure may also have been included in the control group. Such patients have a relatively better prognosis because they do not have true heart failure, and their results may have been overestimated. It may have been advisable to add the left ventricular ejection fraction as a matching variable.

Cardiac amyloidosis has a variety of comorbidities, including aortic stenosis, left ventricular hypertrophy, and bradycardia, all of which have a negative prognostic impact.<sup>3,4</sup> However, they were not statistically matched between the two groups.<sup>1</sup> Thus, their findings may again have been overestimated. It may be of great interest to investigate whether these comorbidities are associated with worse prognosis in patients with cardiac amyloidosis.

Thus, it is unclear how we should recommend AF catheter ablation in patients with cardiac amyloidosis. If comorbidities described above are dominantly associated with a worse prognosis, other interventions may be required in addition to AF catheter ablation, including left atrial appendage occlusion to prevent major bleeding and aortic valve replacement to treat severe aortic stenosis.

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## Data availability

No new data were generated in support of the article.

## References

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