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### Correspondence

# Impact of atrial fibrillation in heart transplant recipients



To the editor:

The incidence and impact of atrial fibrillation in patients with heart failure are well investigated [1], whereas they were poorly known in the heart transplant recipients. Ferretto and colleagues observed a low incidence of atrial fibrillation in heart transplant recipients, probably due to surgical pulmonary vein isolation and vagal denervation [2]. The occurrence of atrial fibrillation was associated with poor clinical outcomes.

Given the surgical denervation, heart transplant recipients might rarely feel heart disease-related symptoms such as angina pectoris and palpitation. This might also be a reason why the incidence of atrial fibrillation is low in heart transplant recipients. It might be better to more clarify the methodology of how atrial fibrillation was detected in their study. Was electrocardiogram routinely performed irrespective of patients' symptoms or performed only when patients complained of any palpitations?

The existence of atrial fibrillation was an independent risk factor of mortality [2]. Atrial fibrillation should be not only a marker of clinical frailty but also directly associated with death. Data of detailed causes of death, for example, stroke and heart failure, would more clarify the clinical impact of atrial fibrillation. If a stroke is one of the major causes of death, we might have to consider anticoagulation therapy for the high-risk cohorts, as we do in other general situations [3].

Given that atrial fibrillation was associated with mortality [2], the next concern is a therapeutic strategy: of note, rate control and rhythm control. For the rate control, it is unknown which medications we should use and which value is a target heart rate. The CASTLE-AF trial demonstrated among those with heart failure that the rhythm control by using catheter ablation was associated with a lower rate of a composite endpoint of all-cause death or

worsening heart failure compared with the medical arm [4]. Aggressive rhythm control might improve clinical outcomes in heart transplant recipients with atrial fibrillation. However, optimal catheter strategy for such a cohort remains unknown: standard pulmonary isolation is effective or any other unique procedures might be required.

### **Declarations**

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Teruhiko Imamura\*

Second Department of Internal Medicine, University of Toyama, Japan

\* Address: Second Department of Internal Medicine, University of
Toyama, 2630 Sugitani, Toyama 930-0194 Japan.

E-mail address: teimanu@med.u-toyama.ac.ip

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