

Letter to the Editor



Clinical Implication of New-Onset Atrial Fibrillation in the Individuals With Cardiac Implantable Electronic Devices

Naoya Kataoka , MD, PhD, and Teruhiko Imamura , MD, PhD

Second Department of Internal Medicine, University of Toyama, Toyama, Japan

OPEN ACCESS

► See the article “Risk of Atrial Fibrillation and Adverse Outcomes in Patients With Cardiac Implantable Electronic Devices” in volume 54 on page 13.

Received: Dec 22, 2023

Accepted: Feb 5, 2024

Published online: Feb 7, 2024

Correspondence to

Teruhiko Imamura, MD, PhD

Second Department of Internal Medicine,
University of Toyama, 2630 Sugitani, Toyama
930-0194, Japan.
Email: te.imamu@gmail.com

Copyright © 2024. The Korean Society of
Cardiology

This is an Open Access article distributed
under the terms of the Creative Commons
Attribution Non-Commercial License ([https://
creativecommons.org/licenses/by-nc/4.0](https://creativecommons.org/licenses/by-nc/4.0))
which permits unrestricted noncommercial
use, distribution, and reproduction in any
medium, provided the original work is properly
cited.

ORCID iDs

Naoya Kataoka

<https://orcid.org/0000-0001-7097-2495>

Teruhiko Imamura

<https://orcid.org/0000-0002-7294-7637>

Funding

The authors received no financial support for
the research, authorship, and/or publication
of this article.

Conflict of Interest

The authors have no financial conflicts of
interest.

To editor:

Lee et al.¹⁾ elucidated, through a comprehensive analysis of a nationwide database, that a substantial subset of patients undergoing cardiac implantable electronic device (CIED) implantation manifested newly diagnosed atrial fibrillation (AF). Notably, the incidence of AF correlated with a susceptibility to adverse clinical outcomes.

The study cohort encompassed patients with diverse arrhythmic pathologies.¹⁾ AF, notorious for its deleterious effect on the loss of atrial kick and the emergence of a rapid and irregular ventricular response, potentially exerts differential impacts on individuals with or without conduction disorders, which should be discussed separately.

Their investigation highlighted an association between the presence of valvular disease and the onset of incident AF.¹⁾ Consistent with prior literature, the risk of developing incident AF may diverge among distinct types of valvular pathologies.²⁾

The presence of AF emerged as a significant contributor to the development of heart failure.¹⁾ Elucidating the trajectory of left ventricular ejection fraction assumes paramount importance in comprehending the mechanisms underlying arrhythmia-induced cardiomyopathy (reduced or preserved ejection fraction).

Considering the adverse prognostic implications of AF uncovered by their study,¹⁾ a pertinent question arises: should catheter ablation be considered for whole newly diagnosed AF in individuals with CIEDs? For instance, the appropriateness of AF catheter ablation in elderly women remains a subject of controversy.³⁾

Data Sharing Statement

The data generated in this study is available from the corresponding author upon reasonable request.

Author Contributions

Conceptualization: Kataoka N, Imamura T; Funding acquisition: Imamura T; Project administration: Imamura T; Resources: Imamura T; Supervision: Imamura T; Writing - original draft: Kataoka N; Writing - review & editing: Imamura T.

REFERENCES

1. Lee SR, Lee JH, Choi EK, et al. Risk of atrial fibrillation and adverse outcomes in patients with cardiac implantable electronic devices. *Korean Circ J* 2024;54:13-27. [PUBMED](#) | [CROSSREF](#)
2. Darby AE, Dimarco JP. Management of atrial fibrillation in patients with structural heart disease. *Circulation* 2012;125:945-57. [PUBMED](#) | [CROSSREF](#)
3. Kalman JM, Sanders P, Rosso R, Calkins H. Should we perform catheter ablation for asymptomatic atrial fibrillation? *Circulation* 2017;136:490-9. [PUBMED](#) | [CROSSREF](#)