THE ANATOLIAN JOURNAL OF CARDIOLOGY

Official journal of the TURKISH SOCIETY OF CARDIOLOGY

# Anticoagulation in Real-Life Patients with Atrial Fibrillation: Impact of Renal Disease

LETTER TO THE EDITOR

To the Editor,

In the latest issue of *The Anatolian Journal of Cardiology*, I have read with keen interest the article by Güzel et al[1] showing the current anticoagulation practice among atrial fibrillation (AF) patients in Turkey. In The Atrial Fibrillation: Epidemiological Registry (AFTER)-2 registry involving 2592 outpatients with AF at a mean age of 69 years, the majority of whom represented the high-risk group, the authors reported a marked increase in the proportion of anticoagulated individuals in recent years up to almost 73%, with 42% on direct oral anticoagulants (most commonly on rivaroxaban) and 31% on warfarin (unfortunately, with a low time in therapeutic range of 40%).[1] From the practical perspective, right dosing regimens of nonvitamin K antagonist oral anticoagulants (NOACs) are of key importance to avoid common and dangerous underdosing as well as infrequent overdosing.[2]

In a Polish study, 30% of AF patients recruited in the years 2013-2016 were prescribed lower doses of NOACs despite indications for a standard dose, whereas 7% of patients received full-dose NOACs instead of reduced doses, especially among subjects treated with rivaroxaban.[3] Did the Turkish patients with AF face the same inappropriate anticoagulation strategy? Given the fact that in the AFTER-2 registry chronic renal failure was found in a surprisingly large proportion of AF outpatients, being the most common comorbidity, data on the use of reduced-dose NOAC as recommended or off-label would be of value while discussing everyday practice. Failure to reduce the dose of NOACs in severe renal disease can increase the bleeding risk.[4] In this context, the definition of renal disease should be presented even if the study design was published 7 years ago. Looking at glomerular filtration rates (GFRs) in Table 1, a proportion of patients with chronic kidney disease (CKD) G4 appears to be small but still observed in the high-risk group. How many patients had GFR below 50 and 30 mL/min/1.73 $m^2$? Our experience indicates that AF outpatients with this stage of CKD could be treated with apixaban or rivaroxaban, but the efficacy and safety of this approach were similar to those noted on warfarin.[5] Did the authors of the present paper use NOACs in this high-risk category?

Summarizing, the AFTER-2 study highlights several similarities and differences between various national registries performed in AF outpatients. However, a high prevalence of high-risk elderly patients typically receiving newer and user-friendly oral anticoagulants is a common feature which joins Turkey with other countries not only from Europe. Patterns of NOAC dosing and their risks in routine clinical practice require more attention in national registries.

**Declaration of Interests:** Lecture honoraria from Boehringer Ingelheim, Bayer Pharma AG, and Pfizer/Bristol-Meyers-Squibb.

## REFERENCES

1. Güzel T, Aktan A, Kılıç R, et al. Oral anticoagulant use and long-term follow-up results in patients with non-valvular atrial fibrillation in Turkey AFTER-2 study. *Anatol J Cardiol*. 2022;26(7):567-576. [CrossRef]



**Anetta Undas** [1,2]

[1]*Department of Thromboembolic Diseases, Institute of Cardiology, Jagiellonian University Medical College, Kraków, Poland*
[2]*Center for Research and Innovative Technology John Paul II Hospital, Kraków, Poland*

**Corresponding author:**
Anetta Undas
✉ mmundas@cyf-kr.edu.pl

**Cite this article as:** Undas A. Anticoagulation in real-life patients with atrial fibrillation: Impact of renal disease. *Anatol J Cardiol*. 2023;27(1):54-55.

DOI:10.14744/AnatolJCardiol.2022.2333

2. Beyer-Westendorf J, Fay M, Amara W. The importance of appropriate dosing of nonvitamin K antagonist oral anticoagulants for stroke prevention in patients with atrial fibrillation. *TH Open*. 2021;5(3):e353-e362. [CrossRef]
3. Lodziński P, Gawałko M, Budnik M, et al. Trends in antithrombotic management of patients with atrial fibrillation. A report from the Polish part of the EURObservational Research Programme - atrial fibrillation General Long-Term Registry. *Pol Arch Intern Med*. 2020;130(3):196-205. [CrossRef]
4. Matusik PT, Leśniak WJ, Heleniak Z, Undas A. Thromboembolism and bleeding in patients with atrial fibrillation and stage 4 chronic kidney disease: impact of biomarkers. *Kardiol Pol*. 2021;79(10):1086-1092. [CrossRef]
5. Undas A, Drabik L, Potpara T. Bleeding in anticoagulated patients with atrial fibrillation: practical considerations. *Kardiol Pol*. 2020;78(2):105-116. [CrossRef]