Editorial

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Gaps between Real-world Practice and Guidelines in Managing Patients with Atrial Fibrillation in Korea

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• See the article "A Prospective Survey of Atrial Fibrillation Management for Real-world Guideline Adherence: COmparison study of Drugs for symptom control and complication prEvention of Atrial Fibrillation (CODE-AF) Registry" in volume 47 on page 877.

The current guidelines recommend anticoagulation treatment for patients with a high risk of a stroke related to atrial fibrillation (AF).¹⁾²⁾ However, It has been reported that antithrombotic treatment for patients with AF in Asia is inadequate, and even those who are treated with warfarin show a poor control of their international normalized ratio (INR) level.³⁾⁴⁾ Previously, a large multicenter observational study in Korea showed that only 42% of patients on oral anticoagulants reached a therapeutic INR range, but it did not demonstrate the proportion of patients who needed to be on anticoagulation or who were on anticoagulation.⁵⁾ In this issue, Kim et al.⁶⁾ reported the current status of anticoagulation in patients with AF in the real-world practice in Korea. Anticoagulation was used adequately in 82.7% of the patients with a high risk of a stroke (i.e., CHA2DS2-VASc score \geq 2). Nonvitamin K antagonist anticoagulants (NOACs) were used in 61.4% and warfarin in 21.3%. This result shows that an increased number of patients have been anticoagulated after the reimbursement policy of NOACs was changed in Korea. However, this issue also reported that an optimal INR level was maintained in only 33% of patients even in tertiary referral hospitals. It should be noted that the under-treatment of warfarin is still a problematic issue.

Rate control is the essential part of AF treatment and frequently improves the symptoms related to AF.¹⁾²⁾ The previous guidelines recommended that the criteria for rate control involve achieving ventricular rates between 60 and 80 beats per minute (BPM) at rest and between 90 and 115 BPM during moderate exercise.⁷⁾ However, after the results of the Rate Control Efficacy in Permanent Atrial Fibrillation: a Comparison between Lenient versus Strict Rate Control II (RACE II) trial,⁸⁾ the treatment guidelines accepted a lenient rate control with a target heart rate of 110 BPM as an initial approach of rate control.¹⁾²⁾ In the RACE II trial, the higher proportion of patients in the strict control group received rate-control group) without a significant difference in the composite endpoints. The current issue showed that rate control was performed in 53.9% of the AF patients. As the author described, the proportion of rate control therapy was less than that in the previous reports. The decreasing trend of the rate control therapy may be related to the influence of a lenient rate control effect, and an improvement in the rhythm control therapy with catheter ablation.

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Conflict of Interest

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A rhythm control strategy is currently indicated for improving symptoms if patients remain symptomatic even after an adequate rate control therapy. In this issue, a rhythm control treatment was performed in 54.4% with antiarrhythmic drugs (AADs) or catheter ablation in 51.8% and 16.2%, respectively. AADs are a fundamental treatment tool for rhythm control, but class Ic agents are not recommended in patients with left ventricular dysfunction. The adherence rate of 78% to the guidelines for the AADs in this study represents that the realworld practice in Korea seems to be faring well.⁶⁾ Catheter ablation of AF is recommended in patients with symptomatic AF refractory or intolerant to AAD treatment.¹⁾²⁾ The reimbursement policy for AF ablation from the National Health Insurance of Korea is limited to patients with symptomatic AF refractory to antiarrhythmic treatment with one of the class Ic or III AADs for at least 6 weeks. Consequently, only 16.2% of the patients received catheter ablation as a rhythm control treatment of AF. It is a relatively small proportion of the rhythm control strategies used as compared to the other countries. However, as catheter ablation of AF is a highly complex procedure, a careful assessment is necessary regarding the benefits and risks for each patient. A recent expert consensus on catheter and surgical ablation of AF suggested some variables that could define the patients in whom a lower success and higher complication rate would occur, and included the presence of a concomitant heart disease, obesity, sleep apnea, left atrial size, patient age, and the frailty and duration of continuous AF. These variables should be taken into consideration when deciding to perform catheter ablation of AF as a rhythm control strategy.9)

As this study cohort was limited to tertiary referral hospitals, it may not have represented the total practice patterns in Korea. However, considering that most primary care physicians in Korea tend to refer AF patients to tertiary centers, this study may reflect the current status of treatment of AF.

In conclusion, the changes in the reimbursement policy of NOACs had a substantial impact on the current practice of anticoagulation associated with AF, which has improved significantly. Catheter ablation as a rhythm control strategy has room for improvement. The authors deserve to be congratulated on their excellent work, and valuable follow-up data from the real-world practice of AF treatment in Korea is expected.

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