

## Uninterrupted Apixaban Safe and Effective in AF Ablation

Written by Emma Hitt Nichols, PhD

The uninterrupted periprocedural administration of apixaban in patients with atrial fibrillation (AF) undergoing radiofrequency catheter ablation was effective in preventing thromboembolism, without increasing the risk of bleeding compared with uninterrupted warfarin. Luigi Di Biase, MD, PhD, Albert Einstein College of Medicine of Yeshiva University, Bronx, New York, USA, and Texas Cardiac Arrhythmia Institute, Austin, Texas, USA, presented a poster from a registry study that evaluated uninterrupted periprocedural administration of apixaban among patients with AF undergoing radiofrequency catheter ablation [Di Biase L et al. *Heart Rhythm*. 2015].

The current approach for anticoagulation in patients with AF undergoing radiofrequency catheter ablation is uninterrupted warfarin that maintains a therapeutic international normalized ratio. However, the role of the nonwarfarin oral anticoagulants, including the factor Xa inhibitors and direct thrombin inhibitors, during the periprocedural period in this population has not yet been established. The purpose of this study was to determine if the use of uninterrupted apixaban during the periprocedural period in patients with AF undergoing ablation was safe and feasible.

In this multicenter, prospective registry study, 400 patients with AF undergoing radiofrequency catheter ablation who received uninterrupted apixaban (n=200) or warfarin (n=200) were enrolled and matched according to age, sex, and type of AF. The dose of apixaban was 5 mg BID for  $\geq 30$  days prior to ablation, and the last dose was administered the morning of the procedure. At baseline, the mean age of the patients was 65.9, 71.5% of patients were men, and 83.5% of patients had nonparoxysmal AF.

There was no significant difference in bleeding rates among the study groups. Major bleeding occurred in 1% and 0.5% of patients in the apixaban and warfarin groups, respectively ( $P=1.0$ ). Similarly, minor bleeding occurred in 3.5% and 2.5% of patients in the apixaban and warfarin groups ( $P=.56$ ), with the overall rate of bleeding at 4.5% and 3% ( $P=.43$ ). There were no reports of symptomatic thromboembolism in either study groups. Among a subset of 29 patients who underwent diffusion magnetic resonance imaging in the apixaban-treated group, there were no signs of new silent cerebral ischemias.

In conclusion, Dr Di Biase stated that the data from this study suggest that uninterrupted apixaban administration

is safe and feasible in patients with AF who are undergoing radiofrequency catheter ablation. He noted that in the present study, uninterrupted apixaban did not increase the risk of bleeding compared with warfarin and was effective in preventing thromboembolism.

## TEE Unnecessary Prior to Ablation for AF With NOACs

Written by Emma Hitt Nichols, PhD

Luigi Di Biase, MD, PhD, Albert Einstein College of Medicine of Yeshiva University, Bronx, New York, USA, and Texas Cardiac Arrhythmia Institute, Austin, Texas, USA, presented a poster of data from a study that evaluated the role of transesophageal echocardiography (TEE) in patients with atrial fibrillation (AF) undergoing ablation and receiving uninterrupted non-vitamin K antagonist oral anticoagulants (NOACs).

It is recommended that patients with AF who are receiving an NOAC and require radiofrequency catheter ablation should be monitored by preprocedural TEE. The purpose of this study was to determine if TEE is necessary in patients who received uninterrupted NOAC therapy (apixaban or rivaroxaban) during ablation for AF.

In this multicenter prospective registry study, 970 patients with AF who were undergoing radiofrequency catheter ablation and taking apixaban (n=514) or rivaroxaban (n=456) were enrolled. Patients took apixaban or rivaroxaban for  $\geq 4$  weeks prior to the procedure. In addition, all patients received a heparin bolus prior to trans-septal catheterization in order to maintain the activated clotting time (ACT)  $> 300$  seconds. A subset of 54 patients was evaluated for silent cerebral ischemia (SCI) via diffusion magnetic resonance imaging (dMRI). At baseline, the mean age was 69.5 years, and 65.6% of patients were men. In addition, 85% of patients had nonparoxysmal AF, the mean CHA<sub>2</sub>DS<sub>2</sub>-VASc score was 3.01, and almost 63% of patients had a CHADS<sub>2</sub> score  $\geq 2$ .

There were no reports of left atrial appendage thrombus among the patients and 42% had "smoke" on intracardiac echocardiogram. No patient experienced a clinical stroke. In addition, dMRI demonstrated no new SCI among the patients. However, 1 patient with long-standing persistent AF who received uninterrupted rivaroxaban experienced a transient ischemic attack.

In conclusion, Dr Di Biase stated that the data from this study suggest that in patients with AF undergoing radiofrequency catheter ablation, TEE is not required to improve safety in those who receive uninterrupted apixaban or rivaroxaban during the ablation.