Symptom-guided Assessment of Atrial Fibrillation Recurrence After Radiofrequency Pulmonary Vein Ablation: is it a Reliable Strategy?

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Dear Editor,

The impact of symptom-guided perception of atrial fibrillation (AF) recurrence after pulmonary vein radiofrequency ablation (PVRFA) has raised serious concern as a potential flaw in taking into account successful procedures. Although the definition of success may vary, bidirectional block through ablated regions is unnecessary in order to achieve a successful procedure[1], and in previously symptomatic patients short and long-term success of PVRFA is focused on detection of symptomatic episodes[2]. Thus, asymptomatic AF episodes are not necessarily credited as recurrence. It is noteworthy that, as a potentially curative procedure, successful PVRFA implies long-term maintenance of sinus rhythm and further reduction of AF-related morbidities, e.g. cardio-embolism. Therefore, anticoagulant withdrawal is the aim.

Using seven-day continuous ambulatory ECG monitoring, Hindricks et al[3] demonstrated that asymptomatic recurrence of AF increased from 5% to roughly 36% during a 12-month follow-up. Same authors[3] reported that when symptom-guided, a 70% rate of freedom of AF episodes after PVRFA in a six-month follow-up was observed. Rate of freedom decreased from 70% to 50% when assessed by seven-day continuous ambulatory ECG monitoring, and further to 45% when transtelephonic ECG transmission was employed.

In this scenario, the actual rate of recurrence of AF episodes after PVRFA is proposed as being higher than previously reported using similar techniques[4] and is clearly dependent on the strategy employed for analysis, whether symptom-guided or ECG-guided. These findings bring about a two-fold concern: do eventual cardio-embolic events represent an issue in this population? Is continued oral anticoagulation needed to prevent prospective embolic events? Based on present information, caution and direct monitoring of heart rhythm after otherwise successful PVRFA may be mandatory in order to determine whether oral anticoagulants could be safely withdrawn in high risk patients.

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