Editorial

A New Era in the Pharmacological Management of Atrial Fibrillation

Atrial fibrillation (AF) is the most prevalent sustained cardiac arrhythmia in clinical practice. It is important to know how and when to treat this troublesome arrhythmia with antiarrhythmic drugs. The attitudes of physicians have changed since clinical trials such as AFFIRM and RACE, which showed that ventricular rate control was not inferior to rhythm control in patients with AF, were reported in 2002. For a long time, many arrhythmologists have been considering how to prevent recurrence of this troublesome arrhythmia. For patients with symptomatic paroxysmal AF, looking back over the last ten years, the "pill-in-the-pocket" approach using potent class I drugs such as flecainide, propafenone or pilsicainide is still frequently resorted to in an outpatient setting. The frequency of prescription of antiarrhythmic drugs for prevention of the recurrence of AF has now declined somewhat, and much attention has turned to up-stream therapy such as ACE-I, ARB, and statins for fundamental treatment.

At present, the main direction of AF management has shifted to how to manage the underlying substrate of AF that perpetuates this arrhythmia and the occurrence of thromboembolism. One of the most important aspects is the inflammation process which may contribute to the development of the AF substrate in the left atrium. Many reports recognize the contribution of inflammation in the left atrium as an underlying process in AF. In clinical practice, in fact, control of blood pressure and improvement of left ventricular function cause reduction of left atrial overload, and may yield favorable outcomes. Valsaltan and irbesartan unfortunately did not bring about any suppression of AF recurrence. More than half of the subjects in these clinical trials were pretreated with ACE-I, and so the primary outcome shows no significant difference. At present, the prevention of thromboembolism is the most important objective in AF patients. For this purpose, the vitamin K antagonist warfarin was the sole oral formula whose action in clinical use is characterized by slow onset of action and slow elimination. This year, the novel anticoagulant dabigatran was released onto the market for clinical use. The advantages of this direct thrombin inhibitor are: firstly, fixed dose without any monitoring, which could offer satisfactory clinical effects superior to those of an adjusted dose of warfarin; and secondly, the clinical effect is not affected by food intake or by co-medication. This can be considered as the beginning of a new era, and the best strategy for each AF patient must be chosen carefully. In the case of rhythm control, non-pharmacological treatment should be chosen at an early stage as a first-line treatment. Pharmacotherapy may still be able to contribute to the management of AF patients, but the choice of an antiarrhythmic drug may reduce the frequency and shorten the duration of the treatment. It will be necessary to seek further appropriate strategies in the future for the treatment of AF patients.

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