Debate: Post-Maze Sick Sinus Syndrome, Followed by AF Recurrence

Pros. Back to Rate Control

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Atrial fibrillation (AF) is the most common sustained arrhythmia and significantly associated with risk of stroke, heart failure, and mortality. However, it remains controversial what is the best treatment among rate control and rhythm control strategy. In AFFIRM and RACE studies, rhythm control strategy had no survival benefit over rate control strategy. Many clinical trials in which treatment strategies of AF were compared showed that antiarrhythmic drug therapy had low success rates and high incidence of adverse effects including sinus node dysfunction.

This patient has long-standing persistent AF, sick sinus syndrome, and significant valvular heart disease. In addition, AF recurred in spite of Maze procedure. Rhythm control is not for nothing. For converting into sinus rhythm, high dose of antiarrhythmic drugs, several times of electric cardioversion, and catheter ablation (or redo Maze procedure) will be necessary. In addition, permanent pacemaker implantation is needed after cardioversion. The patient should be exposed to adverse effects of antiarrhythmic drugs and complications of electric cardioversion, catheter ablation (or redo Maze procedure) and pacemaker implantation. For these modalities of treatment, many times of hospitalization must be needed and the patient should pay huge medical expenses. The patient should also experience mental stress for these procedures. Lifelong anticoagulation is essential in this patient even if sinus rhythm is maintained. By anticoagulation and rate control, we can obtain survival benefit and prevention effect of heart failure and stroke comparable with rhythm control strategy with low cost. We can obtain good quality of life if rate control can be properly performed. Therefore, we have no reason to stick to rhythm control.

Reference

1. Wyse DG, Waldo AL, DiMarco JP, et al. A comparison of rate control and rhythm control in patients with atrial fibrillation. N Engl J Med. 2002;347:1825-33.

2. Van Gelder IC, Hagens VE, Bosker HA, et al. A comparison of rate control and rhythm control in patients with current persistent atrial fibrillation. N Engl J Med. 2002;347:1834-40.