RACE 3 Trial: Risk factor modification increases sinus rhythm maintenance in persistent atrial fibrillation

The Routine versus Aggressive Risk Factor Driven Upstream Rhythm Control for Prevention of Early Atrial Fibrillation in Heart Failure (RACE 3) Trial examined the role of risk factor modification with life-style changes on maintenance of sinus rhythm. In this multicenter, prospective, randomized open-label trial, 250 patients with symptomatic early persistent AF and early mild to moderate heart failure scheduled for electrical cardioversion were studied. Patients were randomly assigned to conventional therapy alone or the addition of upstream therapy including: 1) cardiac rehabilitation including physical activity, dietary restrictions, and regular counselling on drug adherence, exercise maintenance and dietary restrictions; 2) mineralocorticoid receptor
antagonists; 3) statins; and 4) angiotensin-converting enzyme inhibitors and/or angiotensin receptor blockers. The upstream therapies started at least three weeks before electrical cardioversion and were continued for 12 months. If AF relapsed, repeat cardioversions, antiarrhythmic drugs and atrial fibrillation ablation were permitted. The primary endpoint of sinus rhythm after one year of follow-up was present in 89 of 119 (75%) patients in the upstream therapy group compared to 79 of 126 (63%) patients in the control group (p=0.021). Sinus rhythm was assessed with continuous 7 day ECG monitoring during the last week of the study. There was no difference in antiarrhythmic drug use or the number of electrical cardioversions between the two groups.