factor for a good prognosis regarding morbidity, mortality and quality of life. The authors showed that statins used for more than 21 days before the operation reduced the risk of AF recurrence in comparison with the control group by 15% at discharge, by 21% three months after the operation and by 23% six months after the operation. The risk of all forms of AF recurrence was reduced. In this article, statin pretreatment was an independent predictor for sinus rhythm maintenance after operation along with well-known factors, such as a left atrium diameter of < 5 cm and history of paroxysmal AF. The present study is the first to demonstrate beneficial effects of statins on the results of surgical on-pump ablation for AF. In this study, pretreatment with statin did not affect the level of inflammatory markers, such as C-reactive protein and leukocyte count. That could be related to the non-specificity of those parameters.

Accumulated data correspond to the results of other studies of statin pretreatment and its effect on the new onset AF in general and during the postoperative period. According to the results of a meta-analysis published in 2008, statin pretreatment was significantly associated with a reduction in the onset and recurrence of AF in patients undergoing heart operation or in acute coronary syndrome patients [2]. Published data suggest that statin intake before CABG and/or aortic valve replacement reduces the risk of new onset AF. Furthermore, the effective dose of statins should be not < 20 mg.

According to the data of another meta-analysis published in 2008, in 31,725 patients undergoing cardiac surgery, statin pretreatment reduced the risk of new onset AF, the incidence of stroke as well as the mortality [4]. In conclusion, statins may prevent AF early after surgical ablation in patients undergoing concomitant open heart surgery. In this patients’ cohort the routine use of statins may be recommended. Additional studies are necessary to investigate the mechanisms of action of statins. The impact of statins on the sinus rhythm maintenance in other AF treatment methods, dosage and timing of drug utilization should also be investigated.

References


eComment: Are we cooking everything in the same pot?

Author: Yusen Arslan, Siyami Ersek Cardiovascular Surgery Research Hospital, Istanbul, Turkey
doi:10.1510/icvts.2009.230060B

I have read this paper with great interest [1]. The use of statins has been suggested to protect against atrial fibrillation (AF) in some clinical observational and experimental studies but has remained inadequately explored. The aim of this paper was to reveal the beneficial effects of statin pretreatment in patients undergoing open heart surgery for ischemic heart disease or valvular pathology and surgical ablation for AF. This study included different groups: CABG alone, CABG plus valve surgery, valve only, aortic, mitral, proximal AF, and persistent AF. In these groups of patients an ablation procedure was performed and the results studied. In all groups different mechanisms were present: ischemic etiology, rheumatic valve disease, mixed valve lesions and myocardial involvement.

According to the results of a meta-analysis published in 2008, statin pretreatment was significantly associated with a reduction in the onset and recurrence of AF in patients undergoing heart operation or in acute coronary syndrome patients [2].

As there are a lot of studies published on the different effects of statins, except on the effects of lipid lowering, I believe that we should be suspicious. We have to design the subgroups to get the correct answer.

References
