The regularity of the rhythm is a necessary branch of the regimen of health!

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Lord Chesterfield1 wrote, “Regularity in the hours of rising and retiring, perseverance in exercise, adaptation of dress to the variation of climate, simple and nutritious aliment, and temperance in all things are necessary branches of the regimen of health.” We would also add, “The regularity of the rhythm is necessary branch of the regimen of health.”

In 2015, Gillinov and associates2 reported in The New England Journal of Medicine the results of a multicenter trial that compared mitral valve surgery (MVS) with and without surgical ablation of AF (AF). Although the freedom from AF at 1 year among patients with persistent or long-standing persistent AF was significantly higher in the group of patients undergoing both procedures, no additional benefit in terms of survival was recorded. Moreover, the patients undergoing contemporary ablation of AF and MVS showed a higher rate of pacemaker implantation. That trial, however, was designed to detect an absolute increase of 20% in freedom from AF in patients receiving MVS and AF ablation. This reduced the chance to detect any difference in terms of survival, especially if we consider that Gillinov and associates2 reported just the outcome at 1 year, and very likely the negative effects of AF on mortality and morbidity need more time to become evident.3,4

Finally, as is well known, trials do not always mirror the real life. To gain better understanding the effect of trial’s results in the real world, we need to verify what happens in the registry-based studies that describe the outcomes in true practice in nonselected patients. The strength of the study in this issue of the Journal by Suwalski and coworkers5 is that it reports data from one of the largest national registries in Europe, KROK (Polish Nationwide Heart Surgery Registry). The study includes a very large cohort, 11,381 patients, with 2449 undergoing MVS and AF ablation. Moreover, Suwalski and coworkers5 report the results of a one-to-one propensity score–matched analysis (1784 pairs), showing a benefit of surgical ablation of AF in terms of 10-year survival (hazard ratio 0.82; 95% confidence interval, 0.70-0.96). The main weakness of this large cohort report is that some important information is missing, such as details of whether ablation was performed with cryo-probe or radiofrequency probe, left atrial dimensions, the duration of AF, and the type of medications used before and after surgery. In addition, the rate of left atrial appendage (LAA) closure is not reported. This finding could be helpful to better elucidate the role of LAA closure during AF ablation, given that in the trial by Gillinov and coworkers,2 all patients underwent LAA closure. The results of the LAACS (Left Atrial Appendage Closure by Surgery) study6 have already clearly demonstrated that LAA closure may translate into reduced risk of cerebrovascular accident (hazard ratio, 0.3; 95% confidence interval, 0.1-0.8). This registry does not allow verification of the effectiveness of concomitant ablation, and this is probably the weakest point of this study. Despite the previously mentioned limitations, this report provides another aspect of a picture that is becoming clearer and clearer, and we hope it could be useful to push more surgeons to perform AF ablation during MVS.

Central Message
The regularity of the rhythm is necessary branch of the regimen of health. In the real world, ablation of atrial fibrillation during mitral valve surgery is a key point to achieving a better survival.

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References