Commentary: When to restore the rhythm

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Atrial fibrillation is a significant comorbidity in pre- and postoperative cardiac surgery populations. Kowalewski and colleagues1 present a propensity score-matched study of patients undergoing surgical ablation along with another cardiac surgery procedure and show that regardless of the risk profile, long-term survival is improved. Their study spanned 11 years and included 8 tertiary centers in Poland, the Netherlands, and Italy. Of their patient population, only 13.4% underwent surgical ablation for atrial fibrillation. The results showed a 16% mortality decline. The gold standard for treatment of atrial fibrillation in the operating room is the Cox maze IV procedure. There are many renditions of this procedure that surgeons take license to perform and call an ablation with various combinations of lesions and modes of ablation, including radiofrequency and cryo. The variability stems from surgical bias in training, institutional expectations, and experience as well as personal preference. Whatever the reason, atrial fibrillation is sorely undertreated in our cardiac surgery patients. Kowalewski and colleagues’ emphasize the small percentage of patients undergoing ablation and the variability of the type of ablation and the very small number of patients undergoing a full Cox maze IV. Despite the lesser lesion sets, the mortality reduction was significant. This translates to even greater benefit in patients who undergo a complete ablation at the time of surgery and the potential benefit to a much larger segment of our cardiac surgical population. Arguments against concomitant ablation include prolonged crossclamp times and an increased need for a permanent pacemaker. With appropriate training, the additional time needed is minimal and with proper placement of the lesions, the sinoatrial or atroventricular node are not injured. The authors state that more ablations were done with mitral valve operations and fewer with aortic valve replacement, coronary artery bypass grafting, and other procedures. With new technologies like the Encompass clamp (AtriCure), epicardial lesion sets can be completed with excellent results. Exclusion of the left atrial appendage has mutated thru a variety of techniques over the years, but the only reliable methods are excision and oversewing or a left atrial appendage clip. Kowalewski and colleagues1 challenge us to carefully workup our cardiac patients with paroxysmal or permanent atrial fibrillation or those at high risk of postoperative atrial fibrillation and offer them the best chance at freedom from atrial fibrillation by a complete ablation procedure during their cardiac surgery. Anything less is below the standard of care for this patient population. The take-away message from the article is that eliminating atrial fibrillation should be part of the treatment plan for these patients. We need to train cardiac surgery residents to incorporate this into their practice and make it a part of our standard practice. After all, improved patient survival is the ultimate reason we do cardiac surgery.

Reference


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