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Commentary: Is 80 really the new 60?

Osama Haddad, MD, and Kevin Landolfo, MD

The age at which patients undergo cardiac surgery is increasing.¹ Atrial fibrillation (AF) remains the most common sustained cardiac arrhythmia in the United States, occurring in as many as 10% of individuals older than the age of 80 years.² In addition, antiarrhythmic therapy may be less effective in sustaining sinus rhythm, and anticoagulation carries a greater risk of complications in elderly patients.³ The surgical treatment of AF (Cox-maze IV procedure) provides an effective treatment for AF in the general cardiac surgical population, although published data in elderly patients are limited.⁴

In the current issue of the *Journal*, MacGregor and colleagues⁵ examine the impact of age on the efficacy of the Cox-maze IV procedure in 696 patients, including 148 “elderly” (defined as >75 years of age) patients. Study design involves prospective data collection from a single institution analyzed retrospectively. The elderly patient cohort exhibited greater rates of New York Heart Association III/IV heart failure, previous myocardial infarction, hypertension, peripheral vascular disease, and preoperative pacemaker placement than younger patients. In addition, more than 90% of the elderly patients required concomitant cardiac surgical procedures compared with 64% in the younger patient group. As anticipated, given their increased risk profiles, elderly patients had greater rates of overall complications and greater 30-day mortality (6% vs 2%) compared with younger patients. Notably, 21% of

Kevin Landolfo, MD (left), and Osama Haddad, MD (right)

CENTRAL MESSAGE

Surgical ablation for atrial fibrillation is less effective in the elderly; however, the likelihood of symptomatic recurrence is low.

the elderly cohort required permanent pacemaker implantation before discharge.

Patients received meticulous long-term follow-up (median 3.8 years), including 90% of study patients undergoing prolonged arrhythmia monitoring (24 hour-Holter, implantable loop recorder). During follow-up >50% of elderly patients were found to be free from atrial arrhythmias, although freedom from atrial arrhythmias was significantly greater in younger patients over the follow-up time period. Furthermore, multivariable regression identified increasing age as an important predictor of arrhythmia recurrence. Importantly, however, only 6% of the elderly cohort had a symptomatic recurrence at 5 years.

Historically, the results of surgical ablation compare favorably with published reports following AF catheter ablation.⁶ In the current study, the authors present a timely analysis of surgical ablation for the treatment of AF in elderly patients. Contemporary clinical practice has resulted in the routine evaluation and referral of patients, for contemplation of surgical intervention, into the eighth

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decade of life. The elderly patients in the study were a high-risk group of complex patients, with multiple comorbidities, who experienced greater mortality and a greater incidence of postoperative complications and permanent pacemaker requirement. Furthermore, the surgical ablation of AF was less effective over the long term compared with younger patients in the study. The authors rightly conclude that the lower success rate of AF ablation in elderly patients should be considered as part of the surgical decision-making process. Perhaps “80 is not the new 60!” That said, despite the greater risk of recurrent arrhythmia—symptomatic recurrence and need for antiarrhythmic medications at 5 years were low in the elderly patients. The authors demonstrate that, in carefully selected elderly patients, surgical ablation of AF may be an appropriate therapeutic option.

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