Atrial fibrillation and coronary artery bypass grafting: The question is no longer why, but why not?

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In their study in the current issue of the *Journal*, Malaisrie and colleagues¹ examined 24,059 patients undergoing isolated coronary artery bypass grafting (CABG) with preoperative atrial fibrillation (AF). By linking clinical registry data with Medicare records and comparing these patients with patients undergoing CABG without AF, Malaisrie and colleagues¹ determined that untreated AF was independently associated with a higher 30-day mortality and significantly reduced 5-year survival.

This elegant analysis by Malaisrie and colleagues¹ clearly establishes that preoperative AF at the time of CABG is not innocuous. In an examination of contemporary patients presenting with AF at the time of all cardiac operations, patients undergoing CABG currently receive the lowest rate of surgical ablation (SA) at only 33%, whereas across all operative categories, SA is associated with reductions in 30-day mortality and stroke.² The management of AF at the time of CABG with SA is thus a clear area for potential quality improvement.

In a recent meta-analysis, the impact of preoperative AF on early and late outcomes after CABG was associated with an increased risk of early and late mortality (odds ratio, 1.64; and hazard ratio, 1.74, respectively), with morbidities such as stroke, renal failure, and respiratory complications being higher.³ The results of the current study of Malaisrie and colleagues¹ correlate well with these data to establish firmly the concept that AF at the time of CABG is far from benign and that SA may affect survival.⁴

Mounting data regarding the negative impact of AF and the relative safety of adding SA to cardiac operations^{1,2} support the recent expert consensus and clinical practice guidelines that consider SA at the time of CABG a class I recommendation.^{5,6} But can we modify the adverse consequences of AF in CABG patients by performing SA? In a recent similar analysis of Medicare beneficiaries with AF undergoing CABG, patients receiving SA experienced a 42% risk-adjusted mortality reduction at 1 year.⁷

Surgical ablation of atrial fibrillation at the time of CABG may reduce 1-year mortality.

Central Message

Atrial fibrillation at the time of CABG is associated with increased 30-day mortality and reduced 5-year survival. Surgical ablation should be considered to improve quality and reduce mortality.

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Malaisrie and colleagues¹ thus definitively establish the adverse early and late outcomes associated with AF in patients undergoing CABG. Given the intensifying data in support of SA for AF at the time of CABG, the real management question is not why should we perform SA, but why not?

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