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Commentary: Guideline-directed therapy is extremely valuable, but not always current or followed

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In this issue of the *Journal*, Lazar¹ has written a thoughtful review of guideline directed therapy for patients after coronary artery bypass grafting. His summary is based strongly on the American Heart Association Scientific Statement published in 2015.² This article makes clear that surgeon performance regarding guideline-directed therapy is highly variable and generally poor. As surgeons, we must be aware of guidelines and apply them effectively for each patient, but we must also be cognizant of current literature and individual patient needs.

For example, excellent literature has supported changes in the management of blood pressure (BP).³⁻⁵ As characterized in a summary of the 2017 multisociety guidelines, “the benefit of pharmacologic treatment for BP reduction is related to atherosclerotic CVD (ASCVD) risk,” and use of such medications is recommended for secondary prevention of recurrent events.⁶ The Systolic Blood Pressure Intervention Trial (SPRINT) results demonstrated that more intensive systolic BP control, with a goal of systolic BP lower than 120 mm Hg rather than lower than 140 mm Hg, was associated with fewer major cardiovascular events. This trial excluded patients with diabetes, however, and noted a higher adverse event rate with the lower BP. Subsequently, a network analysis of 17 randomized trials concluded that a target systolic BP lower than 130 mm Hg achieved optimal balance between efficacy and safety.⁴ In addition, the original guidelines addressed angiotensin-converting enzyme inhibitors as optimal first line therapy for hypertension; however, 10% of patient will be intolerant of angiotensin-

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CENTRAL MESSAGE

Surgeons must actively consider and initiate perioperative guideline-directed therapy to support optimal long-term outcomes for patients undergoing surgical revascularization.

converting enzyme inhibitors, and treatment with angiotensin receptor blocking medications are a perfectly acceptable alternative.

We must also consider patient access to medication. The best drug available is of no use on the pharmacy shelf. Giving a prescription is not the same as ensuring that the patient receives treatment. We should be sensitive to cost and insurance formulary benefits to be confident the patient can follow medical therapy. Our postoperative visit is the optimal time to check whether the patient has received the medications and complied with therapy. Polypharmacy may also be a barrier to patient compliance, and counseling on simple nonpharmacologic changes, such as sodium intake,⁷ alcohol consumption,⁸ and weight reduction, may modulate pharmacologic needs and thus improve adherence.

As surgeons we should have a strong interest in this topic. We are generally familiar with literature that supports complete revascularization and longer-term efficacy of coronary artery bypass grafting relative to percutaneous coronary intervention or medical therapy. We should not surrender that benefit by failing to do all that we can to optimize long-term care that has demonstrated benefit. We should also be aware of current information that may improve on previously published guidelines. We obviously do not, and cannot, follow our postoperative patients lifelong. We

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really must start them on the optimal path, however, when we send them back to their referring physicians.

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