Commentary: Starting the conversation of race and outcomes in proximal aortic surgery

Ali J. Khiabani, MD, and Puja Kachroo, MD

Racial imbalance is evident. According to the US Census Bureau, there is an interplay between race and ethnicity in determining one’s socioeconomic status (SES). More than 20 years ago, Philbin and colleagues1 teased out the relationship between SES and the delivery of advanced cardiac care after studying more than 28,000 patients in New York State who were hospitalized following an acute myocardial infarction. Patients of lower SES were more often Black and less likely to receive surgical revascularization or percutaneous coronary angioplasty. There have been an increasing number of publications since aimed at describing the complex relationship between race, SES, and short- and long-term outcomes in various disease processes. Disadvantaged populations from ethnic and racial minority groups have greater morbidity and mortality rates after a wide range of cardiovascular procedures.2-6 A paucity of published research addresses the influence of race, sociodemographics, and outcomes in patients with aortic pathology undergoing surgery. In an effort to start to address this knowledge gap, Preventza and colleagues7 reviewed their high-volume, tertiary care center experience of treating more than 2000 Black and White patients who underwent proximal aortic surgery over a 20-year time span.

Of the 217 Black patients, one-fifth were living in poverty. Their incidence of comorbid conditions, including hypertension, chronic renal failure, and tobacco abuse, was greater as compared with the White patients. It is important to note that patients’ ZIP Codes were used to extrapolate data on community socioeconomic (CSE) factors as opposed to the individual SES. Individual factors including insurance status, access to preventative care, previous related emergency department evaluations, distance to tertiary care centers, or any barrier to discharge were not included in this analysis.

Even though more than one half of the Black patients underwent emergency surgery as compared with a quarter of White patients, the overall rate of composite adverse outcomes and operative mortality were similar. Black patients had greater rates of respiratory failure and longer lengths of intensive care unit and hospital stay. When patients were stratified according to their race, Black patients with lower CSE factors had increased renal failure, respiratory failure, composite adverse outcomes, and operative mortality. Unfavorable CSE factors, however, did not affect White patients. The overall adverse outcomes, operative mortality, and long-term survival were similar between the 2 groups when propensity score matching was performed.7

As seen with various disease processes, non-White patients typically present with more advanced disease, greater prevalence of comorbid conditions, and significant delay in seeking care at a high-quality center.5,6 The authors should be congratulated for providing excellent tertiary care for this greater risk population. It is important to note that these same data may not be reproducible outside aortic centers of excellence. Given the relative rarity of proximal aortic disease and specifically in other non-White racial and ethnic groups, larger regional and/or national databases should

CENTRAL MESSAGE
Racial imbalance exists in cardiovascular disease treatment. The interplay of race and socioeconomic status in outcomes after aortic surgery needs to be better elucidated.
also be queried to better understand the practice patterns. This is also an opportunity for a prospective multi-institutional study to investigate the impact of individual SES on aortic surgery outcomes.

References


