Black Americans Are Younger, Sicker and at Higher Risk When Faced with Major Vascular Interventions


CHICAGO, Illinois, February 2018 –African Americans come into the vascular operating room with significant co-morbidities that may explain their more severe level of disease and higher risk factors, report researchers who reviewed 76,000 vascular cases for their report in the February edition of the Journal of Vascular Surgery.

This study drills deeper into the severity of vascular disease in African Americans, adding more fuel to the discussion of health disparities between racial and ethnic groups explored by the American Medical Association, which found that minorities are less likely to receive routine medical care and face higher rates of morbidity and mortality than non-minorities.

Invited commentator Dr. William R. Flinn found the study so profound he stated, “It should be read by every vascular surgeon, in fact, by every physician.”

Researchers have observed similar outcomes in vascular surgical procedures, but determining the cause of these disparities is difficult, since databases do not provide detail on disease severity.

For this report, a multi-institutional team of vascular surgeons led by vascular surgeon Dr. Marc Schermerhorn from Beth Israel Deaconess Medical Center took direct aim at this problem. Using de-identified data from the Vascular Quality Initiative gathered between 2009 and 2014, they found that compared to white patients, black patients were:

- Younger
- More likely to smoke
- More often diagnosed with insulin-dependent diabetes, hypertension congestive heart failure and end-stage renal disease
- Less often medicated with statins
- Less often insured
Black patients also were sicker at the time of surgery. Compared with whites, black patients had more severe:
- Carotid disease (36% versus 31% symptomatic lesions)
- AAA (27% versus 16% symptoms/rupture, and more iliac aneurysm)
- PAD (73% versus 62% critical limb ischemia)

Furthermore, black patients were less likely to be discharged on aspirin and statin therapy after treatment for AAA and PAD than whites.

The authors note that their study is limited by factors common to all database studies including missing data, variability in definitions, and no way to adjust for socio-economic factors, compliance, family support, hospital type and timing of referral.

“Even in hospitals invested in quality improvement – as evidenced by participation in the VQI – black patients present with more advanced disease and more comorbidities compared with whites, despite presenting at a younger age,” states first author Dr. Peter Soden. “And these disparities were uniform across the spectrum of vascular disease, including carotids, AAA and PAD.”

The increase in presenting risk factors, along with disparity in medical management, offers clues as to the well-reported worse outcomes for black patients after major vascular procedures.

“The majority of the disparities highlighted in this manuscript are not from biologic differences, but instead from social, economic and health care delivery factors,” noted Dr. Flinn. “What this most clearly suggests is that there are untold numbers of black [patients] throughout the country with undiagnosed and untreated carotid disease, abdominal aortic aneurysm and PAD (and hypertension, and diabetes, and chronic kidney disease) because they do not have equitable access to health care in the United States in the 21st century.

“The vascular community has a unique opportunity to contribute to the health care debate in this country,” he added. “I hope we have both the scientific rigor and the political courage to pursue it aggressively.”

To download the complete article (freely available Jan. 22 - March 31), click: vsweb.org/JVS-Severe.