Near-National Estimates of Disparities in Outcomes From Abdominal Aortic Aneurysm Repair Between Hispanics and Other Race/Ethnic Groups

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Objective(s):
Much of current national evidence on disparities in vascular surgery outcomes is limited to white-black comparisons, with limited evidence on Hispanics, largely due to poor identification of Hispanics in national databases. Using a purposively developed database, capturing 85% of Hispanics in the US, we sought to estimate inpatient mortality in minorities undergoing abdominal aortic aneurysm (AAA) repair.

Methods:
Using inpatient discharge databases for 2010-2011 covering all hospitalizations across all hospitals in 14 states, we identified all hospitalizations with unruptured and ruptured AAA repair. Race/ethnicity was reported for all but 1.2% of cases. Our main outcome was inpatient mortality. Using logistic regression models, we estimated the relative odds of inpatient mortality adjusted for age, sex, comorbidities, and hospital-level (bed size, procedure volume) and area-level (uninsured, poverty) characteristics.

Results:
Overall, 34,853 unruptured and 2,965 ruptured AAA repairs were examined, with 6.2% and 4.3% of all patients comprising of Hispanics and blacks. Observed inpatient mortality from unruptured AAA repair was higher among Hispanics (2.6%) and blacks (1.9%) compared to whites (1.4%; p<0.001). Inpatient mortality for ruptured AAA repair for Hispanics, blacks and whites were 22.2%, 18.6% and 25.2% (p=0.12). After adjustment for individual, hospital and area factors, inpatient mortality for unruptured AAA repair remained higher among Hispanics (odds ratio = 1.64; p<0.05). Adjusted risk of inpatient mortality from ruptured AAA did not vary by race/ethnicity.

Conclusions:
Hispanics have a higher adjusted risk of inpatient death from unruptured AAA repair relative to whites. Future studies should investigate the role of other patient severity and provider factors.

Author Disclosure Block:

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