The Impact of Race and Socioeconomic Status on Management of Potentially Resectable Pancreatic Cancer: Analysis from a Metropolitan Area in the Southeast United States.

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Abstract

Background: Social determinants of health have been associated with differences in care and outcomes for pancreatic cancer (PC) patients. Prior studies, which have primarily evaluated this at national level with administrative databases, have shown lower rates of receiving multimodal therapy and curative intent resection among African American (AA) patients and those with lower socioeconomic status. The current study evaluated the impact of race and socioeconomic status on the presentation, management, and survival for patients with potentially resectable pancreatic cancer (PC) within a metropolitan hospital system in the Southeast United States.

Methods: Retrospective analysis of patients PC (2014-2020) across a multi-hospital system was performed. Associations between race as well as socioeconomic and clinicopathologic data with the presentation, treatment, and survival were analyzed.

Results: Among 162 patients 76 (46.9%) were African American (AA) and 86 (53.1%) were white. AA patients presented at a significantly younger age (61.5 vs 67, $P < 0.001$) and resided within the lowest 2 quintiles for median income (64.5% vs 40.7%, $P = 0.003$). Between both racial groups, the majority had private insurance/Medicare, however, compared with white patients, AA were more likely to have Medicaid/no insurance (22.4 vs 10.5, p=0.04). Receipt of neoadjuvant therapy and curative intent resection was not significantly different between AA and white patients (48.6% vs 51%, p=0.823; 46% vs 54.6%, p=0.275), $<50^{th}$ percentile vs $\geq 50^{th}$ percentile income (50% vs 50%, p=1.0; 47.6% vs 53.8%, p=0.428), or Medicare/Private vs Medicaid/no insurance (52.9 vs 35.7% p=0.240; 50% vs 53.8%, p=0.719). Administration of adjuvant therapy was not significantly influenced by race (42.9% vs 51.1%, p=0.462) or insurance status (50% vs 35.7%, p=0.329), however was less commonly received by patients in the lower 50^{th} percentile for income (35% vs 59.5%, p=0.026). On survival analysis, outcomes were determined by recipient of multi-modality treatment and histopathological factors but did not differ based on race or socioeconomic status.

Conclusion: The current analysis demonstrates that patients with PC can receive similar treatment, despite differences in race and socioeconomic status. Interestingly, AA patients presented at a significantly younger age, warranting further evaluation of risk factors and tumor biology. We submit that future studies examining the influence of social determinants of health for cancer patients should include studies performed at the local level.