Black patients with esophageal cancer are at a higher risk of death compared to white patients. Although many reasons have been suggested for this, few have given physician actionable information. A new study from the Sidney Kimmel Cancer Center (SKCC) - Jefferson Health points to a different reason—Black patients were less likely to receive surgery for treatable diseases, which could have contributed to their
higher rates of death.

The results were published in the *Journal of Gastrointestinal Surgery*.

"National guidelines suggest that early-stage esophageal cancer should be treated with surgery because data shows that it offers patients the best chances of survival, rather than chemotherapy alone," says senior author Nathaniel Evans, MD, Director of the Division of Thoracic Surgery at Thomas Jefferson University, and Chief of Cancer Services, Center City Division at the SKCC. "Our data show that Black patients are not having surgery for early-stage disease, which may contribute to higher rates of death. With this data, we can now begin to educate patients and providers to change practice."

A total of 60,041 patients were included in the analysis that drew from the National Cancer Database, of whom 4,402 were Black and 55,639 were white across over 1,334 hospitals around the country. In order to ensure an unbiased comparison, Black and white patients were matched by demographics, comorbidities, and tumor characteristics in a 1:1 fashion. The final dataset included 5,858 patients.

The analysis led by first author Samantha L. Savitch, a senior medical student and researcher working in the Department of Surgery and others showed that rates of surgery were significantly lower, 25-40% less for Black patients with esophageal cancer in stages I to III. In addition, the researchers noted that the chances of getting surgery decreased as the age of Black patients increased, and also decreased if the patients were receiving radiation therapy. Black patients were more likely to get surgery if they were treated at a hospital that was more than 5 miles from their homes.

The findings also suggested that patients who were diagnosed with a type of esophageal cancer called squamous cell carcinoma, which is more
common in Black patients, were less likely to receive surgery. All this despite clear evidence that surgical resection is the best chance for survival in patients with esophageal cancer.

"Although the data doesn't give us a reason for the observations we're seeing, it does show us areas where we can take action," says Dr. Evans. "Even when we control for socioeconomic status, insurance status, location, and comorbid conditions, the disparity still persists, it is quite profound. This highlights the need to educate Black patients and their healthcare providers on the importance of surgery in the treatment esophageal cancer."

"One way we are addressing this is by developing a Multidisciplinary GI Cancer group," says Dr. Evans. "We review esophageal cancer patients and ensure their treatment plans are tailored to the individual patient and follow established guidelines."

"This important study is part of a much larger effort at the Sidney Kimmel Cancer Center to understand and mitigate cancer disparities," says Karen Knudsen, Ph.D., EVP of Oncology Services and Enterprise Director of SKCC. "This goal is central to our mission to improve the lives cancer patients and their families, regardless of geography, gender, or demographic. We are thankful to Dr. Evans and the entire research team for raising awareness about this critical national issue."


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