Medical Xpress

Poorer socioeconomic status predicts lower survival in patients with anal cancer

March 19 2018

If you are from a lower income area, your chances of surviving anal cancer are significantly reduced, according to a new study led by investigators at NYU Langone Health's Perlmutter Cancer Center, and publishing online March 12, 2018 in *Cancer*.

Among the first of its kind, the study shows that both overall survival—and cancer specific survival—can be predicted by median household income (MHI) after controlling for additional factors like age, sex, race, and stage of cancer. Investigators found chance of death increased by about 30 percent for those living in areas of poverty.

"Living in a low-income area shouldn't dictate your outcome with cancer and, based on this research, we're seeing that it does," says Daniel Becker, MD, clinical assistant professor in the Department of Medicine and Division of Hematology and Medical Oncology at Perlmutter Cancer Center. "The benefit of this study is that we're identifying higher-risk populations that need additional resources to improve outcomes."

As a relatively rare, but highly treatable disease, squamous cell carcinoma of the anus (SCAA) has been rising in incidence and currently accounts for more than 8,200 cases annually in the United States. This increasing incidence is potentially due to changing trends in sexual behavior and other risk factors like human papilloma virus and smoking.

How the Study Was Conducted

MHI had the strongest association with both overall survival and, specifically, survival from anal cancer. Other secondary predictors of lower survival from anal cancer include gender (men are more vulnerable), older age, African-American race, unmarried status, and, like in most cancers, when it is diagnosed.

The data on SCAA for this study, collected from the Surveillance Epidemiology and End Results Cancer Registry between 2004 and 2013, included a total of 9,550 study participants. MHI, age, sex, race, marital status, stage and grade of cancer, year of diagnosis and radiation-treatment status were recorded. MHI was broken into five distinct wage-earning categories for analysis—less than $46, 840; $46,840-$56,369; $56,270-$60,709; $60,710-$70,819; and more than $70,820. Historically, area-based poverty has been linked to cancer mortality in other tumor types as well—and this study underscores those findings.

"We've made tremendous progress in other areas of cancer to improve screening, treatment and outcomes," says Becker. "Education and improvements are possible—we can start by going into these communities to make sure that all patients, regardless of their economic status, have the access to cancer care that they need."

Provided by NYU Langone Health