Kaposi Sarcoma Still a Concern, Especially for African-American Men

The decline after the advent of antiretroviral therapy did not extend to Black men in the South.

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Kaposi sarcoma remains a concern for some people living with HIV, including those with suppressed viral load, according to studies presented at the 22nd International AIDS Conference (AIDS 2018) this week in Amsterdam.

Once frequently seen among people with AIDS, Kaposi sarcoma (KS), a cancer associated with immune suppression, decreased dramatically after the advent of effective antiretroviral medication, as fewer HIV-positive fell to very low CD4 T-cell counts. Nonetheless, KS remains the most common AIDS-defining cancer, even as rates of some non-AIDS-related cancers are rising as people with HIV live longer.

Elizabeth Chiao, MD, MPH, of Baylor College of Medicine in Houston and colleagues analyzed trends in KS incidence, or new cases, among HIV-positive men ages 20 to 54 in the United States; women were excluded due to their low number of KS cases. The researchers used data from the U.S. Cancer Statistics registry, which covers all 50 states and nearly 100 percent of the population, for the years 2000 through 2014.

More than 12,500 men were diagnosed with KS during the study period, according to the published study abstract. KS incidence declined by about 4 percent per year overall from 2000 through 2014, but notable demographic and regional differences were observed, Chiao said.

Looking at all racial and ethnic groups together, the biggest decrease in new KS cases was seen in the 30-to-44 age group. In contrast, KS significantly increased among men ages 20 to 29 and remained unchanged among those 45 to 54, Chiao reported.

African-American and Latino men saw steeper declines in KS incidence than white men. However, at the end of the study period in 2014, the Latino incidence rate remained well above that of white men, while the rate among Black men was more than double that of Latinos and around three times that of white men.

In an analysis adjusted for age, KS incidence dropped steeply in the West and Northeast regions of the United States, with smaller declines in the South and Midwest.

KS declined substantially in four of the fives cities with the highest incidence—New York, San Francisco, Los Angeles and Miami—which were early epicenters of the U.S. AIDS epidemic. But new KS cases rose in Atlanta and the surrounding area. In 2014, KS incidence in Atlanta was nearly twice that of New York City.

Looking at all these factors together, there was no significant overall change in the rate of new KS cases among African-American men in the Southern United States, Chiao's team concluded. In fact, there was actually a significant increase among Black men in the youngest age group.

Asked about the reason for these disparities, Chiao suggested that Black men in the South—especially young men—may have less access to HIV testing and other care. She recommended that future KS epidemiology, treatment and prevention "should focus on closing the persistent gaps in regional, racial and age disparities."

KS and Immunosuppression

Another study presented at the conference found that some people develop new KS or experience KS recurrence even after they start taking ARVs and see a rise in their CD4 counts.

Romain Palich, MD, at AIDS 2018Liz Highleyman

Romain Palich, MD, of Pitié-Salpêtrière Hospital in Paris, presented an analysis of KS cases that occurred despite sustained viral suppression. This study looked at cases reported to ONCOVIH, a French national multidisciplinary committee that collects data on cancer among people living with HIV.

The analysis included all reported cases of either a first KS diagnosis or a KS relapse in people who had been on antiretrovirals for at least a year and had an undetectable viral load (HIV RNA below 50 copies per milliliter).

The committee registered a total of 72 KS cases between May 2014 and December 2017. KS was the second most common cancer after lung cancer, at 96 cases, and was followed by another AIDS-defining cancer, non–Hodgkin lymphoma (NHL), at 58 cases. These were followed by a variety of non-AIDS-related cancers, including anal cancer (32 cases), oral cancer (28 cases), breast cancer (20 cases) and bladder cancer (16 cases). Liver cancer—associated with hepatitis B and C—was uncommon (nine cases), and no cases of prostate cancer were reported.

Of the people with KS, 21 met the viral suppression criteria. Of the remainder, just over half had a viral load above 50 copies/mL and the rest were missing data. In this group 80 percent were men, the median age was 54 and half were born in Africa. They had been diagnosed with HIV for a median of 14 years prior and the median duration of viral suppression was three years.

Forty percent of the KS cases were first-time diagnoses while 60 percent were relapses, sometimes years after the previous occurrence. All patients had KS skin lesions and many had additional manifestations including lesions of the lymph nodes (27 percent), bronchial tubes (18 percent), bones (18 percent), stomach or esophagus (14 percent) and mucous membranes of the mouth (5 percent). Just under half had received prior treatment for the current KS episode.

The median CD4 count at the time of KS diagnosis was 449 cells/mm^3, though it ranged as high as 625. Nearly half of the individuals had a CD4 count over 500 when diagnosed with KS and only 19 percent had fewer than 200 cells/mm^3—the traditional threshold for advanced immune suppression. The median CD4 level was a bit lower for new KS cases compared with recurrent ones (375 versus 478, respectively).

The median CD4 nadir, or lowest-ever level—reflecting the worse immune suppression ever reached—was 196 cells/mm^3, ranging from 84 to 329. The median CD4/CD8 cell ratio was 0.58; a persistently abnormal CD4/CD8 ratio despite treatment reflects ongoing immune dysfunction.

Fourteen people started KS treatment according to committee recommendations. Seven received anthracyclines (chemotherapy drugs such as doxorubicin), four received taxanes (the chemotherapy class that includes paclitaxel) and three couldn’t receive either because of intolerability and tried other therapies, including bleomycin, etoposide, Revlimid (lenalidomide) and radiation therapy. Seventeen patients continued on their current antiretroviral treatment while four were advised to modify their regimens due to drug interactions or resistance.

Of the 19 people with adequate follow-up, six had partial KS regression or remission, six had stable disease and four experienced disease progression. Palich acknowledged that these patients might not be representative, as more challenging cases might have been disproportionately referred to the committee.

KS progression despite treatment and the toxicity of conventional chemotherapy leads some people to a “therapeutic dead end,” Palich said. He suggested that immunotherapies such as PD-1 checkpoint inhibitors might warrant a pilot study for people with persistent KS that does not respond to standard therapy.

Click here to read the Chiao abstract.

Click here to read the Palich abstract.
