

Poster presentation

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The spectrum of HIV-associated cancers in a South African black population: results from a case-control study, 1995–2004

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Accumulating evidence confirms different patterns of HIV-associated cancers in developed and developing countries. We report results of risk for specific cancers associated with HIV-1 infection from an on-going case control study started in government hospitals in Johannesburg in 1995.

Cases consisted of cancers known or suspected to be associated with HIV infection: Kaposi sarcoma (n = 333), Non-Hodgkin lymphoma (n = 223), cancer of the uterine cervix (n = 1586), Hodgkin lymphoma (n = 154), cancers of anogenital organs other than cervix (n = 157), squamous cell skin cancer (n = 70), oral cavity and pharyngeal cancers (n = 319), liver cancer (n = 83), stomach cancer (n = 142), leukaemias (n = 323), myelomas (n = 189), melanoma (n = 53), lung cancer (n = 363) and sarcomas other than Kaposi (n = 93).

The comparison group comprised 3,717 patients with all other cancer types and 682 patients with cardiovascular diseases.

Odds Ratios (OR) were adjusted for age, sex, year of diagnosis, education level and number of sexual partners.

Significantly increased risks associated with HIV-1 infection were found for Kaposi sarcoma (OR = 47.1, 95% CI = 31.9 – 69.8), Non-Hodgkin lymphoma (OR = 5.9, 95% CI = 4.3 – 8.1), cancer of the cervix (OR = 1.6, 95% CI = 1.3 – 2.0), Hodgkin lymphoma (OR = 1.6, 95% CI = 1.0 – 2.7), cancers of anogenital organs other than cervix (OR = 2.2, 95% CI = 1.4 – 3.3) and squamous cell skin cancers (OR = 2.6, 95% CI = 1.4 – 4.9).

Our study results are supported by data from the pathology-based South African National Cancer Registry. In 2001 Kaposi sarcoma was recorded as the leading cancer in black males age 20 to 44 and in black females aged 20 to 29. From age 30, cervical cancers was the most common cancer diagnosed in black women.

The above figures reflect HIV-related cancers prior to the public health sector roll-out of ART (anti-retroviral therapy), which began in 2005.