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Session: 227. HIV: Co-morbidities and Co-infections
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Background. With the prolonged life-span of persons with HIV (PW) due to anti-retroviral therapy, their cancer burden has increased. Cancer continues to be a leading cause of death among PW. Studying cancer mortality can inform and guide the development of cancer screening and prevention strategies for PWH.

Methods. We analyzed data for all persons ≥13 years who were diagnosed with HIV from 2001 to 2015 and reported to the New York City (NYC) HIV surveillance registry (HSR). Using the HSR and the underlying cause of death obtained from the NYC vital statistics registry and the National Death Index, we examined age-specific and age-standardized mortality rates from cancer and compared time trends of deaths due to HIV-related8 cancer to deaths from non-HIV-related cancers.

Results. There were 34,190 deaths reported among 154,688 PW of whom nearly half (n = 16,804; 49.1%) died due to HIV (excluding HIV-related cancers). Among all deaths, HIV was the leading cause, followed by cancer (both HIV and non-HIV-related) (n = 5,271; 15.4%) and cardiovascular disease (n = 3,724, 10.9%). The top three causes of non-HIV-related cancer deaths were lung cancer (n = 1,040; 19.7%), liver cancer (n = 552; 10.5%), and colorectal cancer (n = 315; 6.0%). Although the mortality rate among PWH declined over time (24.4 to 13.9 per 1,000 person-years from 2001 to 2015), the proportion of deaths attributable to all cancers increased (10.6% in 2001 to 19.9% in 2015, p < .0001). This increase was driven by non-HIV-related cancers (6.1% of all deaths in 2001 to 15.8% in 2015, p < .0001). The mean age increased from 2001 to 2015 among the dead (46 to 56 years) and among the censored (35 to 49 years). After controlling for demographic factors, transmission risk, and last CD4 count, the hazard ratio for cancer deaths was higher among people who inject drugs (HR = 1.5; 95% CI = 1.4–1.7) and those with last CD4 count <200 (HR = 9.3; 95% CI = 8.3–10.5). In adjusted linear regression models among those with diagnosed HTN or DM, having a suppressed VL was associated with lower mean systolic BP (-5.94 mm Hg; 95% CI = 5.01–7.87). In adjusted models, treatments for DM were associated with lower mean glucose levels (β = 0.02; 95% CI = -0.03–0.07). The cumulative incidence of HTN and DM among PWH was 93.2% (95% CI = 92.8–93.6) and 73.5% (95% CI = 72.9–74.1), respectively, at 48.0 months of follow-up. In 10,799 PWH with a detectable VL, the cumulative incidence of HTN was 90.3% (95% CI = 89.7–90.9) and the cumulative incidence of DM was 52.1% (95% CI = 51.3–52.9), respectively, at 48.0 months of follow-up. A significant increase in LFS over 96 weeks was seen in both the placebo and statin arms (p = 0.01 and p = 0.0001, respectively, p = 0.49 between groups). Furthermore, the progression from non-steatosis (LFS ≤ -0.64) at baseline to steatosis (LFS > -0.64) at week 96 was higher in rosuvastatin arm (OR = 4.3, p = 0.03), and remained statistically significant after adjusting for demographics, HOMA (baseline and change over 96 weeks), hepatitis C, heavy alcohol use and HIV parameters. Baseline LFS was independently associated with IP-10 (β = 0.82, p = 0.03) and sCD163 (β = 0.43, p = 0.005), and the increase in LFS over 96 weeks was independently associated with IP-10 (β = 2.85, p = 0.02).

Conclusion. In HIV+ subjects on ART, hepatic steatosis increased over time, regardless of statin treatment, and was independently associated with markers of immune activation. The progression from non-steatosis to hepatic steatosis was greater on statin. Despite its effective role in reducing cardiovascular disease risk and inflammation, statin therapy does not appear effective in hepatic steatosis.

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1814. Leveraging the ART Advantage: diabetes and hypertension along the HIV care cascade in rural South Africa
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Background. Participation in antiretroviral therapy (ART) programs has been associated with greater utilization of care for diabetes and hypertension in rural South Africa. However, there is limited data about whether this apparent “ART advantage” translates into improved chronic disease management in rural communities. We report on the longitudinal care cascade in rural South Africa.

Methods. The Health and Aging in Africa: a Longitudinal Study of an INDEPTH Community in South Africa (HAALSI) is a cohort of 5,059 adults >40 in Agincourt, Limpopo, South Africa. However, there is limited data about whether this apparent “ ART advantage” translates into improved chronic disease management in rural communities. We report on the longitudinal care cascade in rural South Africa.

Results. Participation in antiretroviral therapy (ART) programs has been associated with greater utilization of care for diabetes and hypertension in rural South Africa. However, there is limited data about whether this apparent “ART advantage” translates into improved chronic disease management in rural communities. We report on the longitudinal care cascade in rural South Africa.

Conclusion. The HIV care delivery platform in South Africa appears to offer a vehicle for healthcare delivery for other chronic conditions. Future studies are needed to assess causality of these relationships, and to determine optimal methods of integrating chronic disease with HIV management.

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