

HIV INFECTION AND AGE-RELATED CARDIOVASCULAR COMORBIDITIES: INSIGHTS FROM THE APPLES STUDY

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Background: As HIV-positive people age, management of chronic comorbidities which are typically associated with ageing have become of increasing concern. HIV infection, treatment and behavioural factors are likely to play a role in the generation of these co-morbidities. It has been proposed that HIV infection is associated with an increased risk of cardiovascular disease (CVD) and possibly diabetes mellitus. The objective of our study was to compare the rates and risk of heart disease, stroke, thrombosis, and diabetes in HIV-positive vs. HIV-negative men.

Methods: We analysed data from the Australian Positive & Peers Longevity Evaluation Study (APPLES), a prospectively recruited cross-sectional sample of 228 (51.1%) HIV-positive and 218 (48.9%) HIV-negative gay and bisexual men (GBM), aged ≥ 55 years. Regression methods were used to assess the association of HIV status with self-reported comorbidities, adjusting for non-HIV-associated factors: age, smoking and family history of the specific diseases.

Results: Of 446 patients, 389 (200 (51.4%) HIV-positive) reported their disease history. The reported rates of comorbidities were higher in the HIV-positive group: heart disease 19.5% vs. 12.2%; stroke 7.5% vs. 4.2%; thrombosis 10.5% vs. 4.2%; and diabetes 15.0% vs. 9.0%. In adjusted analyses HIV-positive GBM had significantly increased odds of reporting heart disease (adjusted odds ratio (aOR) 1.93, $p=0.03$) and thrombosis (aOR 2.80, $p=0.02$). In our analysis, HIV status was not significantly associated with either mean age at diagnosis of heart disease (51.1 for HIV-positive vs. 54.2 for HIV-negative GBM, $p=0.64$) or 10-year CVD risk estimated by using the Framingham Risk Score.

Conclusion: HIV-positive GBM more commonly reported an increased risk of heart disease and thrombosis. The results of this study further highlight the need to understand the impact of HIV on age-related comorbidities in order to guide optimal screening and treatment strategies to reduce the risk of these comorbidities among the HIV-positive population.

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