

# First Study on cardiovascular risk in HIV infected patient in a group of population in Bukavu South Kivu, Democratic Republic Of Congo

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## Background

The frequencies of cardiovascular and infectious diseases including HIV are increasing in developing countries. It is possible that HIV-infected patients have a higher than the general population cardiovascular risk. But very few studies in Africa have been published on this subject. Objective: Evaluate the cardiovascular risk in HIV-infected patients.

## Methodology

The demographics, anthropometrics, and biological parameters, the conventional cardiovascular risk factors and the signs of a classic angina were investigated in 138 HIV-infected patients and compared to 280 subjects non infected by HIV. The probability of ischemic cardiopathy according to supposed risk factors was modeled in a multiple logistic regression. The p-value less than 0.05 was considered statistically significant.

## Results

Although patients infected with HIV were relatively young (30-49 years) compared to the general population (72.5% vs 31.1%,  $p < 0.0001$ ), they had metabolic syndrome more than the general population ( $p < 0.05$ ).

In this group, total cholesterol and HDL-cholesterol were higher in patients undergoing antiretroviral treatment than in those without it ( $p=0.01$ ).

32.3% of HIV-infected patient versus 13.1% in the control group [ $p < 0.0001$ ] had presented a classical angina.

In a multivariate analysis, only Human Immunodeficiency Virus infection [adjusted odds ratio (95%),  $p$ : 2.93 (1.42 to 6.08), 0.003], smoking [3.37 (1.50 - 7.60), 0.003] and cholesterol [2.16 (1.07 to 4.34), 0.03] showed an independent effect on the probability of occurrence of chronic coronary artery disease.

## Conclusion

The prevalence of chronic ischemic cardiopathy is higher among the peoples living with the Human Immunodeficiency Virus than in the general population.

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