

PREVALENCE OF THE METABOLIC SYNDROME IN A COHORT OF HIV-INFECTED NIGERIAN PATIENTS ON HIGHLY ACTIVE ANTIRETROVIRAL THERAPY USING DIFFERENT CRITERIA.

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BACKGROUND: Highly Active Antiretroviral Therapy (HAART) has been associated with an increased risk of metabolic and fat redistribution abnormalities. Nucleoside Reverse Transcriptase Inhibitor (NRTI)- based regimens, which are the most commonly used in the population under review, are believed to be associated with less risk of these metabolic abnormalities.

AIM: The purpose of the study was to compare the prevalence of metabolic syndrome (MS), as defined by the International Diabetes Federation (IDF) criteria and the Adult Treatment Panel III (ATP III) criteria, in a cohort of HAART-treated patients in an ambulatory HIV clinic in Nigeria.

METHODS: Data from an on-going cross-sectional study amongst HAART treated patients was analysed. Information on demographics, HIV infection, medication, personal and family history of cardiovascular risk factors and body fat redistribution was obtained. Physical examination including anthropometry and blood pressure measurement was done. Blood samples for fasting plasma glucose and lipid profile were obtained and analysed according to standard criteria. The prevalence of (MS) defined by the IDF metabolic syndrome consensus definition and the ATP III criteria were compared. The results are presented as mean +/- S.D. Statistical significance was taken as $p < 0.05$.

RESULTS: There were 72 persons studied, 22 (30.6%) males and 50 (69.4%) females. The mean age of the study population was 38.2 +/- 8.1 years and the mean duration of HAART was 2.25 years +/- 0.99 years. MS was present in 21.9% and 19.4% of the study population using the IDF and the ATP III criteria respectively. MS patients were older (43.6 +/- 10.1 vs 36.8 +/- 6.8 years, $p = 0.03$) and more likely to be males (37.5% vs 21.9%).

CONCLUSION: Metabolic syndrome is seen in about a fifth of HIV patients and may contribute to the high morbidity and mortality from renovascular/ cardiovascular disease in this group of people. The prevalence of the metabolic syndrome was found to be higher using the IDF criteria but the difference was not significant. As with insulin resistance MS was commoner in males. MS prevalence values were also similar to those from other studies around

the world.