OMICS Group Conferences
Accelerating Scientific Discovery

International Conference on
HIV/AIDS, STDs, & STIs
October 24-25, 2013 Holiday Inn Orlando International Airport, Orlando, FL, USA

Burden of metabolic syndrome in HIV patients with or without art at Hawassa University

Demo Yemane Tesfaye[1], Samuel Kinde[2], Girmay Medhin[3] and Techalew Shimelis[1]
[1]Department of Medical Laboratory Science, CMHS, HU
[2]Department of Medical Laboratory Science,CHS, AAU
[3]Aklilu Lemma institute of Pathobiology, AAU

HIV infection and its treatment with highly active antiretroviral therapy (HAART) can induce severe metabolic complications including lipodystrophy, dyslipidemia, and insulin resistance, which are all reminiscences of metabolic syndrome (MS). To estimate the prevalence of MS and evaluate risk factors of MS among HIV-positive patients with or without HAART at Hawassa University Referral Hospital. A cross-sectional study design was used to collect the required data between February 2012 and April 2013 at Hawassa University Referral Hospital. A total of 374 HIV positive participants (188 on ART and 186 on Pre-ART) were investigated. Data on demographic and anthropometric characteristics was collected from study participants using WHO stepwise approach while pregnant women and less than 18 years old subjects were excluded from this study. Fasting blood sample was collected from all participants for the measurement of glucose, total cholesterol, triglyceride, HDL-cholesterol and LDL-cholesterol. The International Diabetes Federation (IDF) with adjusted waist circumference for Africans and the National Cholesterol Education Program: Adult Treatment Panel III (ATP) Criteria were used to define MS. Of the 374 study participants, 68% were females, and 50.3% were receiving ART. Using the IDF criteria, metabolic syndrome was diagnosed in 25% of patients receiving ART compared to 22.5% of the ART naive group (OR: 1.14 CI: 0.71-1.84). Using the ATP criteria, the prevalence of MS was 18.1% in the ART groups compared to 15.6% in ART naïve group (OR: 1.20, CI: 0.69-2.06). HIV infected patients receiving ART had significantly elevated cholesterol, triglyceride, glucose and LDL-c levels but lower CD4+ cell counts compared to ART naive groups. Women, BMI ≥ 25, age ≥45 years, and elevated total cholesterol (≥200 mg/dl) were significantly associated with the presence of MS irrespective of the criteria used. In addition, d4T-3TC-EFV regimen and duration for more than 3 years in any of the regimes were associated with MS using the ATP criteria. The high prevalence of MS in HIV patients in the current study suggests the need for creation.

demoyaf@yahoo.com