Diabetes Mellitus and Hypertension in HIV-infected Patients Receiving Antiretroviral Therapy: A Pilot Study

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ABSTRACT

Background: Antiretroviral therapy (ART) has been reported to be associated with new-onset diabetes mellitus (DM), hypertension, and metabolic syndrome. However, the data available in Thailand is scanty. This study aimed to determine the prevalence of DM, impaired glucose tolerance, and hypertension in HIV-infected patients receiving ART.

Methods: In this cross-sectional study, HIV-infected patients who attained the Infectious Diseases Clinic of Ramathibodi Hospital, Bangkok, Thailand in January 2006 were studied. Fasting plasma glucose (FPG) and oral glucose tolerance test (OGTT) were performed in each patient.

Results: There were 43 patients with a median age of 42 (range, 27-61) years, and 69.8 percent were male. Median (range) body weight and body mass index were 59 (42-77) kg and 21 (16.4-32.4) kg/m2, respectively. Median (range) CD4 cell count was 318 (185-803) cells/mm3, and median (range) HIV RNA was <50 (<50-488,000) copies/ml. Three (7%) patients had DM from initial FPG test. After OGTT, eight (18.6%) and six (14%) patients had impaired glucose tolerance and DM, respectively. Sixteen (37.2%) patients had hypertension. Logistic regression analysis revealed that an older age was a predicting factor for both DM (p=0.037) and hypertension (p=0.032); a higher FPG was also a predicting factor for hypertension (p=0.021).

Conclusions: DM and hypertension are relatively common in Thai HIV-infected patients receiving ART, particularly those who are older. OGTT may be a better test to detect DM than FPG. In addition, hypertension should be screened for this population. However, a large-scale study in the future is clearly needed to confirm our results. (J Infect Dis Antimicrob Agents 2006;23;131-8.)

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