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Prevalence of Metabolic Abnormalities in HIV-Infected Patients Receiving Highly Active Antiretroviral Therapy and Antiretroviral-Naïve Patients

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Objective: Metabolic abnormalities are common long-term side effects of antiretroviral treatment. In this study we investigated the prevalence of dyslipidemia and metabolic abnormalities in 2 groups of HIV-infected patients receiving highly active antiretroviral therapy (HAART) and antiretroviral-naïve patients.

Methods: 40 HIV infected patients treated by HAART as a case group and 15 HIV naïve, as a control group enrolled in this study. The two groups were well balanced with respect to age, sex, CD4 cell counts.

Results: Levels of total cholesterol, triglycerides, and lactate were elevated in 24%, 37%, and 25% of patients, respectively. The prevalence of elevated triglyceride and cholesterol levels was significantly higher among patients receiving antiretroviral therapy than it was among those who were not receiving treatment. Fasting hyperglycemia was noted in 11% of patients overall, but this was not significantly associated with antiretroviral treatment group. Low HDL levels were noted in 44.4% of patients overall, and this finding did not vary by treatment group. We found significant difference regarding mean of total cholesterol and LDL between treated group and controls ($P < 0.05$). No significant difference was observed in mean of HDL, Lactate and fasting blood sugar levels between each treated group and controls.

Conclusion: We concluded that in HIV infected patients with exposure to HAART, hyperlipidemia was a common metabolic complication. The prevalence of metabolic abnormalities in Iranian HIV-infected patients was similar to those reported for Western and Asian studies.

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25.003

HIV Infection, HAART, and Gynecomastia. Epidemiological, Clinical, and Pathogenetic Correlates

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Background: Gynecomastia (G) is an emerging untoward event in patients treated with HAART.

Patients and Methods: Through a cross-sectional study performed on around 1,000 HIV-infected patients (p) treated with antiretrovirals at our reference centre in Bologna (Italy), we identified all cases of G related to the administration of at least 12 consecutive months of HAART, to assess possible correlations of G with a spectrum of clinical, laboratory, and therapeutic variables (and including all adverse effects of HAART itself). All p with true G (as distinguished from lipomastia by an ultrasonography assay) were considered evaluable, while p with other predisposing conditions (endocrine disease, alcohol abuse, liver cirrhosis, and use of drug possibly predisposing to G), were carefully excluded.

Results: Twenty-one out of 616 evaluable HIV-infected male p (3.4% of our p population), developed a true G when aged 12–58 years. Seven p out of 21 never received protease inhibitor (PI)-containing therapies, while efavirenz-based regimens apparently prompted G in seven p who were naïve for PI, and worsened this disturbance in three further p who abandoned PI for efavirenz. Considering nucleoside analogues (NA), two p developed G during treatment conducted with dual isolated NA. Comparing the different administered NA, stavudine seemed to be the most commonly used compound, also taken for the longest time ($p < .01$). A complete hormonal workup did not detect significant abnormalities, save in one p, who had slight serum FSH, LH, and testosterone abnormalities (with normal prolactin levels). When considering the eventual correlation with the most common HAART-induced disturbances, some forms of lipodystrophy was concurrent in all the 21 p with G, while hypertriglyceridemia, hypercholesterolemia, and hyperglycemia were found in 15, 9, and three p, respectively. During the subsequent 12–36-month follow-up, a spontaneous amelioration of G was never observed, notwithstanding eventual HAART modifications. Due to local hyperesthesia, tenderness, and discomfort, two p resorted to surgery.

Conclusions: G is probably an underestimated problem in the setting of HAART. The frequent association of G with other HAART-related dysmetabolism suggests possible common pathogenetic causes.

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Symptomatic Hyperlactatemia and Lactic Acidosis at Tygerberg Hospital: Incidence, Characteristics, Clinical Manifestations, Outcomes and Safety of AZT Substitution for D4T

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Background: Higher incidences of symptomatic hyperlactatemia (SHL) and lactic acidosis (LA) have been reported