Prevalence of dyslipidemia and dysglycaemia in HIV infected patients.

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Abstract:

Highly active antiretroviral therapy (HAART) has dramatically reduced AIDS morbidity and mortality, however long-term metabolic consequences including dysglycaemia and dyslipidemia have raised concern regarding accelerated cardiovascular disease risk. To determine the period prevalence of dyslipidemia and dysglycaemia in HIV-infected patients. Cross-sectional comparative group study. Kenyatta National Hospital, a tertiary HIV dedicated out-patient facility. Consecutive HIV-positive adult patients. Dyslipidemia: presence of raised total or LDL cholesterol or low HDL cholesterol, or raised triglycerides. Dysglycaemia: presence of impaired fasting glucose or impaired glucose tolerance, or diabetes mellitus. Results: Between January and April 2006, out of 342 screened patients, 295 were recruited and 58% were females. One hundred and thirty four (45%) were on HAART, 82% of whom were on stavudine, lamivudine and either nevirapine or efavirenz. Overall prevalence of dyslipidemias was 63.1% and dysglycaemia was 20.7%. High total cholesterol occurred in 39.2% of HAART and 10.0% HAART naive patients (p<0.0001, OR 5.18, CI 3.11-10.86), whereas high LDL cholesterol occurred in 40.8% and in 11.2% respectively (p<0.0001, OR 5.43, CI 2.973-9.917). HDL levels were low in 14.6% and 51.3% among HAART and HAART naive patients, respectively, (p<0.0001, OR 0.16, CI 0.091-0.29) while high triglycerides occurred in 25.6% and 22.5% respectively (p=0.541 OR 1.84 CI 0.688-2.037). Among patients on HAART compared to HAART naive patients, diabetes was found in 1.5% against 1.2% (p=0.85), impaired fasting in 2.2% against 0.6% (p=0.30) and impaired glucose tolerance in 16.4% against 21.1% (p=0.22), respectively. HIV-infected patients demonstrated a high prevalence of dyslipidemia. HAART use was associated with high levels of total, and LDL cholesterol and high triglyceride levels, an established athrogenic lipid profile. However, HAART was not associated with low HDL cholesterol and had no significant effect on dysglycaemia.