

## Abstract

Highly active antiretroviral therapy is effective in reducing viral load and increasing survival in HIV-1 infected patients. It consists of two nucleoside reverse transcriptase inhibitors and a protease inhibitor or two nucleoside reverse transcriptase inhibitors and a non-nucleoside reverse transcriptase inhibitor.

The efficacy of Highly active anti-retroviral therapy (HAART) is however compromised by adverse events such as lipodystrophy in patients on long-term HAART. This study was carried out in 265 HIV-1 seropositive patients treated with HAART for 6 months and longer, in order to correlate patients' age, gender, CD4 counts, WHO stage at initiation of HAART, duration and type of anti-retroviral therapy with development of lipodystrophy. A longer duration of therapy was found to be significantly associated with the development of lipodystrophy with 19 patients (24.7%), 73 patients (60.8%) (OR 2.06; CI 1.21 to 3.51, p value 0.004) and 39 patients (67.2%) (OR 2.34; CI 1.21 to 4.46, p value 0.006) having lipodystrophy at 6 to 18, 18 to 36 and 36 to 72 months of treatment, respectively. The odds of lipodystrophy after HAART for 18 to 36 months and 36 to 72 months was 4.14 ( $p < 0.0001$ ) and 6.179 ( $p < 0.0001$ ) times, respectively, higher than after HAART for 6 to 18 months. There was no association between age, gender, CD4 counts, WHO stage and the development of lipodystrophy.