Lipodystrophy and weight changes: data from the Swiss HIV Cohort Study, 2000-2006

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BACKGROUND AND OBJECTIVES: Combination antiretroviral therapy (cART) is changing, and this may affect the type and occurrence of side effects. We examined the frequency of lipodystrophy (LD) and weight changes in relation to the use of specific drugs in the Swiss HIV Cohort Study (SHCS).

METHODS: In the SHCS, patients are followed twice a year and scored by the treating physician as having 'fat accumulation', 'fat loss', or neither. Treatments, and reasons for change thereof, are recorded. Our study sample included all patients treated with cART between 2003 and 2006 and, in addition, all patients who started cART between 2000 and 2003.

RESULTS: From 2003 to 2006, the percentage of patients taking stavudine, didanosine and nelfinavir decreased, the percentage taking lopinavir, nevirapine and efavirenz remained stable, and the percentage taking atazanavir and tenofovir increased by 18.7 and 22.2%, respectively. In life-table Kaplan-Meier analysis, patients starting cART in 2003-2006 were less likely to develop LD than those starting cART from 2000 to 2002 (P<0.02). LD was quoted as the reason for treatment change or discontinuation for 4% of patients on cART in 2003, and for 1% of patients treated in 2006 (P for trend <0.001). In univariate and multivariate regression analysis, patients with a weight gain of ≥5 kg were more likely to take lopinavir or atazanavir than patients without such a weight gain [odds ratio (OR) 2, 95% confidence interval (CI) 1.3-2.9, and OR 1.7, 95% CI 1.3-2.1, respectively].

CONCLUSIONS: LD has become less frequent in the SHCS from 2000 to 2006. A weight gain of more than 5 kg was associated with the use of atazanavir and lopinavir.