EV1119

ePoster Viewing

Virology: AIDS and HIV infection

Trends and outcome of HIV-positive patients with late presentation for combination antiretroviral therapy in Taiwan: a cohort study

J. Zhang[1], P. Wu[1], S. Yang[1], Y. Luo[1], W. Liu[1], S. Chang[1], C. Hung[1]

[1]*National Taiwan University Hospital, Taipei, Taiwan*

Objectives We aimed to assess the trends of late presentation for combination antiretroviral therapy (cART) and evaluate its impact on treatment response to cART in Taiwan, where nationwide access to free-of-charge cART and CD4 and plasma HIV RNA load (PVL) monitoring is provided.

Methods Between June 2012 and October, 2014, we followed all antiretroviral-naive HIV-positive adults who initiated cART at a university hospital in Taiwan. We collected the information on demographic and clinical characteristics, antiretroviral regimens, and CD4 and PVL at baseline and weeks 4, 12, 24, 36 and 48. Late presentation for cART was initiation of cART at CD4 counts <200 cells/mm^3. Genotypic resistance assays were performed retrospectively on the HIV-1 isolates from the archived blood samples taken before cART. Antiretroviral resistance mutations were identi?ed using the HIVdb program of the Stanford University HIV Drug Resistance Database. Multidrug resistance (MDR) was defined as having genotypic resistance to more than one class of antiretroviral agents.

Results During the study period, 621 HIV-positive patients, 97.3% being male and with a mean age of 32.7 years, initiated cART. The baseline CD4 and PVL was 279 cells/mm^3 (SD, 179) and 4.9 log_{10} (SD, 0.7) copies/ml, respectively. The overall proportion of late presentation for cART was 31.7%, which decreased from 45.9% in the first 6-month period to 19.5% in the last 5-month period. Compared with non-late presenters, late presenters were older (37.1 vs 30.1 years), more likely to be heterosexual (8.6 vs 3.1%) and HBsAg-positive (16.5 vs 7.8%), and to have higher PVL (5.28 vs 4.71 log_{10} copies/ml) and aminotransferases, and more patients with opportunistic infections (15.2 vs 0.5%), leukopenia (30.3 vs 9.3%), and hemoglobin <9 g/dl (7.6 vs 0.7%). Genotypic resistance to any NRTI and integrase inhibitor and MDR strains was more commonly seen in late presenters than non-late presenters: NRTI, 8.3 vs 2.3%; integrase inhibitor, 9.2 vs 3.7%; and MDR, 2.7 vs 0.4%. Genotypic resistance to nNRTI (6.3 vs 7.4%) or PI (2.8 vs 1.2%) was not significantly different between the two groups. A similar proportion of the patients initiated nNRTI-containing regimens (92.9 vs 93.6%). Within the first 24 weeks of cART, more late presenters had to switch regimens than non-late presenters for any causes (54.6 vs 48.1%) and for resistance or unsatisfactory virological response (12.6 vs 5.5%). While the proportions of patients achieving PVL<400 copies/ml at week 24 were insignificantly lower with regimen changes made (91.2 vs 95.4%), late presenters had a higher mortality rate than non-late presenters (3.5 vs 0.7%).

Conclusions In Taiwan, the proportion of HIV-positive patients who presented late for cART was decreasing. Late presenters had more unfavorable clinical and virological characteristics that might contribute to the increased probability of switching cART and mortality once cART was begun.