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MEETING ABSTRACT   **Open Access**

Immuno-virological response and clinical outcome in naive elderly patients treated with antiretroviral therapy (HAART)

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Background

In rich countries the prevalence of HIV/AIDS among elderly patients (≥50 years) is increasing as a result of the extended survival of HIV[+] patients receiving antiretroviral treatment (HAART), growing new infections and new late diagnosis. Data about efficacy and tolerability of HAART in old age are controversial. The aim of this retrospective study is to evaluate the efficacy of HAART and clinical outcome in a ≥50 year group of patients compared to a control group (<50 years old).

Materials and methods

The study population includes all naïve patients treated with HAART from November 1996 to June 2008 and followed in two different units of Infectious disease in Catania (Sicily). We evaluated the following parameters: epidemiological (sex, age, risk factors), immuno-virological (CD4 cell count, HIV RNA viral load), and clinical (CDC stage, first treatment, number and causes of therapeutic switch, new AIDS diseases and death).

Results

272 HIV[+] patients were enrolled for the analysis: 212 (78%) male; 121 (44%) heterosexuals, 101 (38%) homo-bisexuals, 44 (16%) injection drug users; 138 (50%) CDC A, 32 (12%) CDC B, 102 (38%) CDC C; median CD4 cell count was 163/μl (IQ range 49–322), median HIV-RNA viral load 5.0 $\log_{10}$ (IQ range 4.3–5.4). Fifty-six subjects (20.6%) were ≥50 years.

At baseline, among the elderly, the sexual risk was more frequent than in young (p<0.01); older patients were also more frequently symptomatic (p = 0.002).

Instead we did not observe any difference as to CD4 cell count and HIV-RNA copies/ml.

After twelve months of HAART no divergence was noticed between elderly and younger patients regarding median absolute increase of the CD4 cell count (+170 vs. +208 cells/μl) and percentage of patients with HIV-RNA <400 copies/ml (85% vs 83%).

After twenty-four months, a higher number of patients with HIV-RNA <400 copies/ml (as treated analysis) was been shown in elderly group (p<0.05). Probability of first treatment discontinuation (Kaplan Meier analysis), number and causes of therapeutic switch were similar in both groups. After a median follow-up of 65 months no differences were seen regarding new AIDS diseases whereas elderly patients had a higher probability of death compared to younger (14.3% vs 4.6%) (p=0.02).

Conclusions

This retrospective study shows a similar immunological response in elderly and younger naive patients on HAART. Older patients have a higher probability to maintain undetectable HIV-RNA viral load (adherence effect?). However, hard clinical end-points are more frequent in older subjects. Prospective studies are necessary to further investigate our findings.

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