



Abstract

High rate of long-term clinical events after ART resumption in HIV-positive patients exposed to antiretroviral therapy interruption

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Objective:

We analyzed the incidence rate of long-term events in patients on ART previously exposed to therapy interruption.

Design:

A single-center cohort study involving participants in antiretroviral therapy interruptions (ARTI) clinical trials (n = 10) was conducted.

Methods:

Non-AIDS events after ART resumption were analyzed. A control group not exposed to ARTI was randomly selected from the same cohort and a propensity score (PS) of belonging to ARTI group was estimated based on age, gender, CD4 nadir value, time from HIV diagnosis to ARTI, time from HIV diagnosis to starting ART and time of suppressed viral load, and used to adjust effect estimates.

Results:

One hundred and eighty-one patients were included, 136 in ARTI and 45 in the control arm. Median time of known HIV-1 infection was 21 years and median time from ART resumption to first non-AIDS event was 5.2 years. A

significantly higher proportion of patients with ARTI had an event as compared with control group [raw percentages: 43% (n = 53) vs 23% (n = 10), p = 0.015]. These differences were confirmed when only the non-AIDS events occurring after ART resumption were analyzed (aHR = 2.43, 95% CI 1.15–5.12). The logistic model adjusted for the PS indicated that patients with an ARTI had a four-fold higher risk of having at least one non-AIDS event (p = 0.002).

Conclusions:

We found a higher risk of having at least one non-AIDS event years after ART resumption in HIV-infected patients exposed to ARTI as compared with controls. These data should be taken in consideration for future functional cure clinical trials.