Incidence of Sexually Transmitted Diseases (STD) in the recent years: data from the ICOHA cohort.

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1. INTRODUCTION

The role of fully suppressive cART in reducing the transmission of HIV infection to non-HIV infected partner has been well established (1). Nevertheless, some local genital factors such as bacterial or viral infections, namely Sexually Transmitted Diseases (STD), can increase the shedding of HIV in semen, leading to an increase of HIV transmission (2).

This aspect has been well demonstrated in people not assuming cART, whereas it is unknown whether the same increase risk is applicable to people on fully suppressive cART.

It has been recently demonstrated that effective cART does not completely reduce the risk of HIV transmission in sexually active men who have sex with other men (MSM) with non-concurrent STDs (3). This has been recently hypothesized that the persistent risky behaviours may reduce the beneficial effect of cART on the incidence of HIV infection (4), to study the incidence and determinants of STD may help to improve knowledge regarding risky behaviours.

A previous analysis within the ICONA cohort demonstrated that the use of highly active antiretroviral therapy (cART) was not associated with a higher risk of newly acquired HBV and syphilis, and that suppressive cART was associated with a lower risk of HBsAg seroconversion (5). Nevertheless, a comprehensive approach considering all STI has never been assessed.

Specific objectives were to analyze temporal trends in the incidence of sexually transmitted diseases (STDs) in a cohort of HIV+ people and to evaluate factors associated with the risk of a new STD occurrence.

2. PATIENTS & METHODS

All HIV-infected patients enrolled in the ICOHA Foundation Study from 1997 were included in the present analysis.

STD is defined at the occurrence of any of the following conditions: any-stage syphilis (primary, secondary, tertiary, and unspecified), hepatitis, Sexually Transmitted Diseases (STD), and meta-analysis. (Sex Transm Dis. 2008 Nov;35(11):946-59).

STD incidence rate (IR) were calculated according to current plasma viral load level (HIV-RNA<50 c/ml, HIR-Naive people and on treatment interruption were associated with a lower risk of HBsAg seroconversion (5). Nevertheless, a comprehensive approach considering all STI has never been assessed.

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3. RESULTS

Data of 9,168 pts were analysed. 2355 were women (25.7%). Over 46,736 PYFU, 996 episodes of STD were observed (crude IR 21.3/1000 PYFU).

Age at first visit 37.3 (SD 9.3) 74% were male, 6% of patients were heterosexuals, 25% IDU, 6% other risk. 3327 were enrolled in 1998-2002; 1273 in 2003-2007; 4568 in 2008-2012. Median (IQR) CD4/mm³ and HIV-RNA/ml at STD: 433 (251-600) and 10,900 (200-63300). 40 (40%) episodes occurred while people were on ART (IR 38.4/1000 PYFU) 543 (54.3%) were patients under treatment interruption (HIV-RNA 61916 PYFU).

4. DISCUSSION

• Risk of acquiring a new STD has been increasing over the years of observation within the ICOHA cohort.

• The use of ART reduce the risk of acquiring STD (as a proxy of whether a person is regularly seen for care).

• Highly tailored interventions (focused on young people, MSM, people with low CD4+ cell count, those with low schooling and those recently diagnosed with HIV) - involving Community groups and/or specific experts for every field - to prevent STDS and potential further spread of HIV infection should be considered.

• The biological role of virological suppression in reducing the risk of STD cannot be derived from our results.

REFERENCES


