

Primary HIV: clinical experience from an outpatient HIV clinic in Portugal

Isabel Abreu¹, Rita Filipe¹, Luísa Graça¹, Pedro Palma¹, Elsa Branco¹, Rogério Ruas¹, Margarida Tavares¹, Cátia Caldas¹, Carmela Piñeiro¹, Jorge Soares¹, Rosário Serrão¹, António Sarmiento¹

1 - Infectious Diseases Department, Centro Hospitalar São João, Oporto, Portugal

Introduction

- The diagnosis of an early human immunodeficiency virus (HIV) infection may offer an opportunity to start antiretroviral therapy during the earliest stages of the disease, contributing to the recovery of the immune system and eventually reducing the risk of transmission to other individuals.

Objectives

- To estimate the prevalence of primary HIV infection in a *cohort* of patients with HIV that were naïve for antiretroviral treatment (ART); to describe the sociodemographic, clinical characteristics and outcome after starting ART in this particular group of patients.

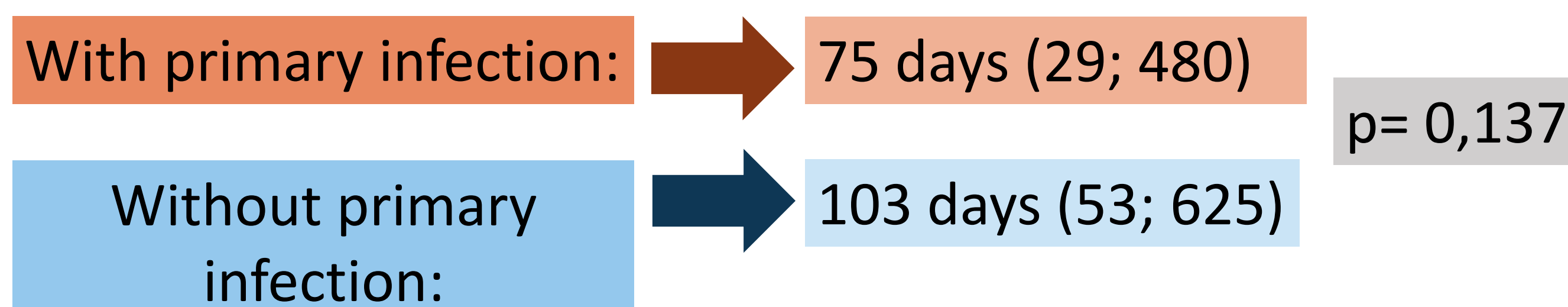
Material & Methods

- Retrospective observational study. We selected all patients that were diagnosed with HIV and that started ART between January 2015 and December 2017 that were followed in our HIV outpatient clinic in Centro Hospitalar São João. We defined primary HIV infection in patients with detectable viremia and/or initial negative or indeterminate serologic test in patients with compatible symptoms of acute HIV infection.

Results

Patients characteristics n= 332			p
	With primary infection n= 28	Without primary infection n= 304	
Men	27 (96,4%)	227 (74,7%)	
Age (median; interquartile range)	35,7 (26,2-42,8)	38,8 (30,3-49,2)	0,03
Risk			
Heterosexual	10 (35,7%)	148 (48,7%)	
Men who have sex with men (MSM)	18 (64,3%)	135 (44,4%)	0,034
Injection Drug Users	0 (0%)	12 (4,0%)	
Unknown	0 (0%)	9 (3,0%)	
Initial CD4+ count (median; interquartile range)	434,5 (361,5-532,5)	386 (149,5-545)	0,069

Time since the diagnosis until the beginning of ARV (median in days; interquartile range):



Chosen antiretroviral scheme (3rd drug besides a backbone of tenofovir/emtricitabine or abacavir/lamivudine):

Drug class	Primary infection (n=28)	Without primary infection (n= 304)
Non-nucleoside reverse transcriptase inhibitors	3 (10,7%)	89 (29,3%)
Protease inhibitors	1 (3,6%)	16 (5,3%)
Integrase inhibitors	24 (85,7%)	199 (65,5%)

p=0,077

Outcome after 1 month on ART:

	Primary infection	Without primary infection	p
Median of the raise of CD4+ count (interquartile range)	210 (91; 304)	110 (28; 209)	p=0,013
Median CD4+ count at the end of the observation period (mean: 17 months)	830 (643; 943)	626 (395; 859)	p=0,002

Conclusion

- Patients with a primary HIV infection diagnosis were younger and more frequently MSM. We may speculate that a frequent periodic HIV screening test in these subgroup of individuals may be beneficial and will allow premature antiretroviral treatment.
- The beginning of ART on a very early stage of infection appears to be beneficial in the preservation and/or fast immunological recovery (evaluated by the CD4+ count), reinforcing this approach in these patients.