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Abstract (poster session)

Prevalence of transmitted antiretroviral resistance and distribution of HIV-1 subtypes among recently infected patients in Gran Canaria, Spain between 2003 and 2011

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Objectives: The aims of this study were to assess the frequency of HIV-1 transmitted drug resistance (TDR) and subtypes in recently infected patients in Gran Canaria (Spain) and to describe their epidemiological characteristics. **Methods:** The study was performed between 2003 and 2011 and included all HIV-1 recently infected patients diagnosed by antibody seroconversion observed in two samples in the last 12 months or the presence of an acute retroviral syndrome in a patient with a risk contact and a previous seronegative sample. HIV-1 reverse transcriptase and protease genes were genotyped using HIV-1 ViroSeq Genotyping System (Abbott Molecular). FASTA sequences were analyzed using the HIVDB program for the detection of resistance and the REGA HIV-1 system for subtyping. The medical records of patients were reviewed to collect clinical and epidemiological data. Differences were examined using chi test. A p value of <0.05 was considered significant. **Results:** A total of 80 recently infected patients were included. Seven (8.8%) patients had TDR, 5 (6.2%) to non nucleoside reverse transcriptase inhibitors (RTIs) with K103NS mutation and 2 (2.5%) to nucleosides RTIs (one with M184I and one with D67N and K219Q mutations). The prevalence of TDR was 30% between 2003 and 2005, 7.9% between 2006 and 2008 and 3.1% between 2009 and 2011 ($p < 0.05$). The subtype was obtained in 79 patients, 10 (12.6%) of them infected with non-B subtypes (8 CRF02_AG, one D and one G subtypes). Recent transmission of non-B subtypes was first detected in 2006. The patient characteristics are presented in the Table 1. **Conclusions:** The rate of TDR decreased in the last years, from 30% between 2003 and 2005 to 3.1% between 2009 and 2011. The TDR was detected in both B and non-B subtypes. Non-B subtypes have been detected since 2006 and they have represented 12.6% of the cases; 90 % in native population and 50% in the patients infected by heterosexual route.

Table 1. Clinical-epidemiological characteristics of patients with TDR and non-B subtypes

	N (%)	Patients with TDR (n:7) N° (%)	Non B subtypes (n:10) N° (%)
Sex			
Male	73 (91.2)	7 (100.0)	8 (80.0)
Female	7 (8.8)	0 (0.0)	2 (20.0)
Age (years)			
<30	32 (40.0)	2 (28.6)	4 (40.0)
30-40	30 (37.5)	3 (42.8)	3 (30.0)
40-50	15 (18.8)	2 (28.6)	1 (10.0)
>50	3(3.7)	0 (0,0)	2 (20.0)
Origin			
Immigrant	11 (13.7)	1 (14.3)	1 (10.0)
Natives	69 (86.3)	6 (85.7)	9 (90.0)
Route of transmission			
Men who have sex with men	59 (73.7)	6 (85.7)	5 (50.0)
Heterosexual	15 (18.8)	1 (14.3)	5 (50.0)
Intravenous drug use	1 (1.2)	0 (0,0)	0 (0,0)
Unknown	5 (6.3)	0 (0,0)	0 (0,0)
Plasma RNA HIV-1 (log₁₀)			
<5.0	54 (67.5)	4 (57.1)	8 (80.0)
>5.0	26 (32.5)	3 (42.8)	2 (20.0)
CD4 cell count/mm³			
≤350	3 (3.7)	0 (0,0)	0 (0,0)
350-500	4 (5.0)	0 (0,0)	0 (0,0)
>500	73 (91.3)	7 (100.0)	10 (100.0)
HIV Subtype (n=79)			
Non B	10 (12.6)	1 (14.3)	-
B	69 (87.3)	6 (85.7)	-
TDR			
Yes	7 (8.7)	-	1 (10.0)
No	73 (91.2)	-	9 (90.0)

N°(%): Number (percentage)

TDR: Transmitted drug resistance