SIX YEARS EXPERIENCE IN THE USE OF RALTEGRAVIR AS PART OF REGIMENS FOR TREATMENT OF HIV-INFECTED IN A PERUVIAN HOSPITAL OF SOCIAL SECRITY

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OBJECTIVE

The objetive was evaluating the efficacy and security in real clinical condition of the use the Raltegravir as part of regimens for treatment of HIV-infected patients in an Peruvian reference hospital of social security

BACKGROUND

Since 2007, integrase inhibitors (INSTI) were approved for treatment of HIV-infected patients[1]. Raltegravir was the first licensed INSTI[1,2]. In Peru, regimens of antiretroviral therapy including INSTIs are recommended in the national guideline for treatment of HIV-infected patients, but its use is limited[3]. Raltegravir is the only INSTI available within the social security in Peru. However, clinical data is also limited in our country.

MATERIAL AND METHODS

An observational retrospective study in a population of patients receiving antiretroviral treatment in the infectology-unit of Hospital Nacional Edgardo Rebagliati Martins-ESSALUD, between years 2012 and 2018. We included all patients who started using raltegravir and had at least two measurements of HIV-viral load and laboratory tests before and after (24 weeks) initiating treatment. Data were collected, using a standardised case report form from clinical records. The eficacy was defined as the viral load negative in a minimum period of 24 weeks after receiving raltegravir and security as the absence of adverse events or need to discontinuation treatment. The viral load was determined by the PCR method in HIV Architec team (Roche®). CD4 levels were measured by flow cytometry in the BDFACS Canto II equipment. The hemogram and the biochemical determinations were processed in the Sysmex 2000 and Advia 1800 equipment, respectively. Media and standard deviation were used for quantitative variables and frequencies and percentage for qualitative variables. Data was analysed in SPSS V.22.

RESULTS

A total of 157 patients were included in the analysis. Age range more frecuent was from 45 to 55 years (25.4%; n=40) and proportion of male was 76% (n=119). A 10 % (n=16) of patients were naive with median baseline CD4 counts of 100 cells/ul and whom were on antiretroviral treatment, had HIV viral load median >400 copies/ml. More frequent indications were: virologic failure (n=102) and toxicity (n=33). Virological suppression was achieved in 92,4% (n=143) at week 24 and adverse effects presented in 10% of them (Table1). More frequent commodities were arterial hypertension (23.73 %) and diabetes mellitus (16.95%) and one patient coinfected with hepatitis C. There were no discontinuations of raltegravir due to adverse effects.

CONCLUSION

Use of Raltegravir as part of regimens for treatment of HIV-infected patients appears safe and effective

Table 1. Profile of patients at entry and at 24 weeks

		At entry		At 24 weeks	
		n	%	n	%
Load viral					
	Not detectable	23	14.65	145	92.36
	> 400 copies/ml	134	85.35	12	7.64
CD4 level					
	< 200 cel/µL	66	42.04	32	20.38
	200–500 cel/µL	56	35.67	63	40.13
	> 500 cel/µL	35	22.29	62	39.49
HEMOGRAM AND SERUM BIOCHEMISTRY					
Hemoglobine					
	Males (< 13 mg/dl)	40	25.48	13	8.28
	Females (< 12 mg/dl)	15	9.55	9	5.73
Neutropenia (Absolute Neutrophils)	Mild (1-1.5 10^3/µL)	17	10.83	4	2.55
	Moderate (0.5-1 10^3/µL)	6	3.82	0	0
	Severe (< 0.5 10^3/µL)	1	0.64	2	1.27
Absolute Platelets	< 150 10^3/µL	10	6.37	1	0.64
Glucose					
	> 106 mg/dl	16	10.19	26	16.56
Creatinine					
	Males (> 1.1 mg/dl)	9	5.73	13	8.28
	Females (> 0.8 mg/dl)	7	4.46	5	3.18
Hepatic profile					
	AST> 34 U/L	40	25.48	28	17.83
	ALT> 49 U/L	29	18.47	23	14.65
	AP> 129 U/L	48	30.57	40	25.48
	TB> 1.2 mg/dl	9	5.73	7	4.46
	DB> 0.3 mg/dl	8	5.1	13	8.28
	IB> 0.5 mg/dl	15	9.55	12	7.64
Lipidic profile					
	Cholesterol> 200 mg/dl	38	24.2	43	27.39
	HDL-C< 60 mg/dl	127	80.89	113	71.97
	LDL-C> 100 mg/dl	68	43.31	71	45.22
	Cholesterol/HDL-C> 5	42	26.75	49	31.21
	Triglicérides> 250 mg/dl	34	21.66	34	21.66

NOTE: ALT: Aminotransferase, alanine; AST: Aminotransferase, aspartate; AP: alkaline phosphatase; TB: Total bilirrubin; DB: Direct bilirubin ; IB: Indirect bilirubin; HDL-C: High density lipoprotein; LDL-C: Low density lipoprotein.

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