



POSTER PRESENTATION

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# NRTIs (ZDV and d4T) side effects in PLHAs attending the antiretroviral treatment centre of B. J. Medical College Aad Civil Hospital At Ahmedabad, Gujarat, India

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From 16<sup>th</sup> International Symposium on HIV and Emerging Infectious Diseases  
Marseille, France. 24-26 March 2010

## Background

This study reviews common side effects experienced by PLHAs who were initiated with Zidovudine or Stavudine based FDC ART regimen as per Indian National ART Guidelines attending ART Centre of B. J. Medical College and Civil Hospital, Ahmedabad, Gujarat, India.

## Methods

All the ICTC confirmed HIV Positive Patients were registered and initiated with FDC ART at ART Center of the Institute as per Indian National ART Guidelines; recommends the use of 2 NRTIs (ZDV/d4T + 3TC) + 1 NNRTI (EFV/NVP). Baseline parameters like CD4 count, necessary laboratory investigations, TB Workup and adherence counseling were carried out and on follow up. Depending on the level of hemoglobin NRTIs were chosen.

## Results

Total 4379 patients were studied during the period of May 2005 to November 2008 initiated with either ZDV or d4T based ART regimen. Out of them total 3355 (76.62%) were on either ZDV or d4T based ART regimen and regular visitor of the ART Centre are the study target, while the remaining 1024 (23.38%) were either lost to follow up (LFU), expired and transferred out were excluded, Table 1.

**Table 1**

ART Regimen	Side Effect	No. of Patients	%
ZDV n = 1538 45.85%	Anemia	212	13.78%
d4T n = 1817 54.16%	Peripheral Neuropathy	220	12.11%
	Dyslipidaemias	143	7.87%
	Lipoatrophy	108	5.94%
	Lactic acidosis	6	0.33%
	Pancreatitis	5	0.27%

Few patients 15 (0.83%) had multiple side effects, while in remaining 71 (3.91%) the exact reason for regimen change was not available.

## Discussion

The most observed side effects after initiating ART; Anemia (ZDV based) and Peripheral Neuropathy (d4T based) requires regular monitoring for early diagnosis. Substitution within same group must be done. While ART is becoming increasingly effective; side effects are low compared to studies in India and Cambodia by *Sharma et al., 2008* (Anemia 20.0%, Peripheral Neuropathy 22.2%) and *Isaakidis et al., 2008* (Anemia 21.92%).

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To optimize adherence and hence efficacy, clinicians must focus on preventing side effects whenever possible to yield the overall successfulness to the National Program.

Published: 11 May 2010

doi:10.1186/1742-4690-7-S1-P65

**Cite this article as:** Nihalani *et al.*: NRTIs (ZDV and d4T) side effects in PLHAs attending the antiretroviral treatment centre of B. J. Medical College Aad Civil Hospital At Ahmedabad, Gujarat, India. *Retrovirology* 2010 **7**(Suppl 1):P65.

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