



Outcomes in Real Practice with Comprehensive Care in A VA 2006



Sandra Paez, MS PA-C, David Cennino, MD, Tom Chiang, MD, Robert Eng MD

VA New Jersey Health Care System, East Orange, NJ and New Jersey Medical School, Newark, NJ.

Background

- Multiple new antiretroviral classes and agents available to manage HIV infection have caused increase concern for amplification of multiple metabolic abnormalities.
- Some, but not all protease inhibitors (PI), have been strongly associated with dyslipidemia. Switching to a non-PI containing regimen has resulted in decreased lipid levels.
- VA New Jersey Health Care System manages over 500 HIV patients utilizing the VISTA/CPRS medical records system. PI's accounted for over 50% of antiretroviral therapy used in 2006.

Objective

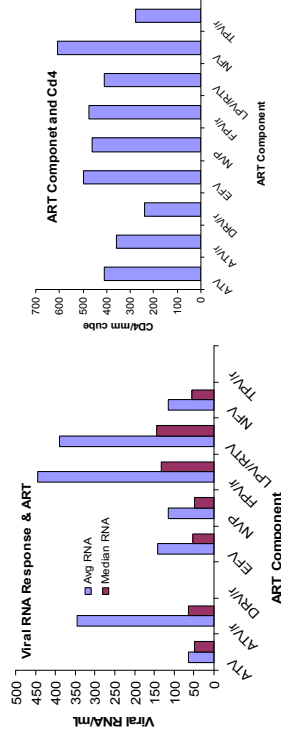
- Determine the prevalence of dyslipidemia in a cohort of HIV patients taking PI/NNRTI that are being treated at an urban Veteran's Affairs medical center
- Determine the impact of HIV viral load RNA control of those patients on a PI/NNRTI in a real practice setting

Methods

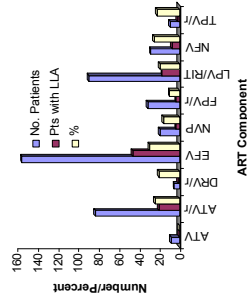
- Retrospective chart data was retrieved from CPRS/Vista for the year 2006 for
 - HIV Prescriptions (boosted and unboosted PI's, NNRTI's)
 - Lipid lowering Agent Prescriptions
 - Blood lipid levels
 - HIV RNA blood levels
 - HIV CD4/CD8 levels
- The data were imported into MS Access and analyzed using SQL into:
 - HIV Treatment & Lipid lowering Agent
 - HIV Treatment & Blood lipid levels
 - Lipid lowering Agent Prescriptions
 - HIV Treatment & HIV RNA blood levels
 - HIV Treatment & HIV CD4/CD8 levels
- The query results were exported into Excel for refining the count data and for generating chart

Results

- 500 patients were treated at the VANJHCS in 2006
- 375 were prescribed NNRTIs/Pis (almost all as boosted, except for NFV)
- 20 were long term non-progressors,
- 105 patients either refused therapy or did not need guideline for therapy
 - 80 (30%) patients required lipid lowering agents
 - 262 (70%) did not require lipid lowering agents
- All patients had CD4 counts above 200 cell/cu mm and plasma RNA median <150 (with exception of DNV/r and TPV/r patients)



Requirement for Lipid Lowering Agents



Conclusions

- No lipid differences between patients on PI or NNRTI regimen
- Pt's who required lipid lowering agents had much higher levels of Cholesterol, LDL, and triglycerides than those not needing lipid lowering agents
- Despite strong association of PI induced hyperlipidemia, majority of patients did not require lipid lowering agents.
- As opposed to clinical trials, in a real practice setting, antiretrovirals can be changed to maximize benefits and minimize harm as needed.
- PI and NNRTI regimens are well tolerated and have a high rate of efficacy in this urban VA population.

References

- Mulligan K, Grunfeld C, Tai V, Algren H, Pang M, Chemoft D, Lo J, Schambelan M. Hyperlipidemia and insulin resistance are induced by protease inhibitors independent of changes in body composition in patients with HIV infection. JAIDS 2000; 32:35-43.
- Fisaca C, Fumerob E, Crespo M, Rosomb B, Ferrer E, Virgilia N, Ribera E, Gatead J, Podzamezrb D. Metabolic benefits 24 months after replacing a protease inhibitor with abatacavir, efavirenz or nevirapine. AIDS 2005; 19:917-925.

MEDIAN	CHOL	LDL	TGL	HDL	av-VL	Median VL
N=7	221		315.5			
ATV +	174	27	146	29		
ATV -	197	27	154	29		48
N=79	215	120	444	41		
ATV/r +	165	86	143.5	47		
ATV/r -	175	93	179	45.5		65
ATV ALL	175.5	90	172.5	45	306	
N=2	185.5		123		8592	41100
DRV/r -						
N=116	216.5	107	211.5	52		
EFV +	138	98	101	60		
EFV -	182.5	93	171	57	141	54
N=23	187.5		769.5			
FPV/r +	157	101	157.5	45		
FPV/r -	168	101	171.5	45	445	132
N=77	227	151	227.5	64.5		
LPV/r +	169.5	88	153	53.5		
LPV/r -	180	98	187	56	389	144
N=18	210.5	122	244	47		
NFV +	175	159.5	140	53.5		
NFV -	193	122	165.5	47	116	56
N=13	183	78	104	49		
NVP +	192	124	112.5	56		
NVP -	187.5	103	105	53.5	117	49
N=2	203		144			46000
TPV/r -						