

Supporting Information

Patterns and Risk Factors for Alanine Aminotransferase Elevation among HIV Patients on Nevirapine Regimens

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Table 3: Comparison of the traits of patients with normal and elevated ALT levels

Predictor variable	Normal (<1.25×ULN) n (%)	Elevated (>1.25×ULN) n (%)	P-value
Sex			
Female	136 (73.5)	49 (26.5)	<0.01*
Males	26 (46.4)	30 (53.6)	
Age at ART initiation (years)			
≤ 45	136(69.1)	61 (30.9)	0.204
> 45	26 (59.1)	18(40.9)	
Marital status			
Married	103 (66.5)	52 (33.5)	0.954
Single	39 (68.4)	18 (31.6)	
Divorced	3 (75)	1 (25)	
Widowed	16 (66.7)	8 (33.3)	
Separated	1 (100)	0 (0)	
Ethnic group			
Bantu	118 (64.1)	66 (35.9)	0.129
Nilotes	31 (20)	12 (15.4)	
Cushites	6 (3.9)	0 (0)	
Body mass index (kg/m²)			
< 18.5	8 (61.5)	5 (38.5)	0.654
>18.5	154 (67.5)	74 (32.5)	
Alcohol use			
Never	119 (70.8)	49 (29.2)	0.131
Occasionally	42 (58.3)	30 (41.7)	
Regularly	1 (100)	0 (0)	
Smoking			
No	160 (67.8)	76 (32.2)	0.190
Yes	2 (40)	3 (60)	
Baseline ALT (U/L)			
≤ 40	155 (76)	54 (24)	<0.01*
>40	2 (7.7)	24 (92.3)	
CD4 cell count×10⁹/L			
≤ 250	100 (63.3)	58 (36.7)	0.202
>251	49 (72.1)	19 (27.9)	
ART regimen at initiation			
TDF+3TC+NVP	52 (73.2)	19 (26.8)	0.019*
AZT+3TC+NVP	59 (75.6)	19 (24.4)	
d4T+3TC+NVP	45 (53)	40 (47)	
d4T+3TC+EFV	1 (100)	0 (0)	
AZT+3TC+EFV	2 (66.7)	1 (33.3)	
TDF+3TC+EFV	3(100)	0 (0)	
Concurrent illnesses			
None	123 (67.6)	59 (32.4)	0.197
Hypertension	25 (69.4)	11 (29.6)	
Diabetes	2 (66.7)	1 (33.3)	
PUD	1 (25)	3 (75)	
Asthma	3 (100)	0 (0.0)	
Chronic pain	3 (60)	2 (40)	
Cancer	2 (100)	0 (0.0)	
Others	3 (50)	3 (50)	

*Significant P-values are in **bold**

Table 4: Stratified data for factors associated with ALT elevation

Variable	Crude β (95% CI); P-value	Females	Males
		β (95% C.I); p-value	β (95% C.I); p-value
Ethnicity	-2.10 (-3.25, -0.95);< 0.001	-1.20 (-2.39, -0.01); 0.048	-6.61 (-9.28, -3.93);< 0.001
Ethnic group			
Bantus	-	-	-
Nilotes	-3.56 (-5.54, -1.59);< 0.001	-3.12 (-5.27, -0.97); 0.005	-9.12 (-13.17, -5.08);< 0.001
Cushites	-7.88 (-13.04, -2.71); 0.003	-6.70 (-11.99, -1.41); 0.013	-12.89 (-25.10, -0.68); 0.038
Smoking	6.37 (1.40, 11.35); 0.012	11.31 (4.46, 18.18); 0.001	-3.01(-10.82, 4.78);0.448
Concurrent illness	0.78 (0.32, 1.24); 0.001	0.70 (0.08, 1.32); 0.026	0.15 (-0.58, 0.90) ;0.677
Type of illness			
None	-	-	-
PUD	9.11 (3.03,15.18); 0.003	16.72 (9.48, 23.97);< 0.001	-5.87 (16.76, 5.01);0.290
Chronic pain	5.46 (0.45, 10.48); 0.033	4.95 (-0.21, 10.12) ;0.06	5.53(-6.35, 17.40) ;0.362
Poor adherence	-1.77 (-3.38, -0.16); 0.031	-1.62 (-3.20, -0.04); 0.045	-3.29 (-7.86, 1.28);0.158
Previous ADRs	0.03 (-2.08, 2.15); 0.977	2.02 (0.10, 3.95); 0.040	-
Baseline ALT level	13.48 (11.20, 15.77);< 0.001	10.14 (7.34, 12.96);< 0.001	13.52 (9.36, 17.68);< 0.001
Regimen at ART initiation	1.23 (0.50, 1.98); 0.001	0.34 (-0.37, 1.04) ;0.344	4.67 (2.10, 7.24);< 0.001
Type of regimen			
TDF+3TC+NVP	-	-	-
AZT+3TC+NVP	-1.80 (-3.86, 0.26); 0.086	-1.23 (-3.26, 0.81) ;0.237	-7.80 (-13.96, -1.63); 0.013
D4T+3TC+NVP	4.45 (2.55, 6.34);< 0.001	1.53 (-0.40, 3.46) ;0.121	4.26 (-1.27, 9.78) ;0.131
Duration of therapy	0.43 (0.05- 0.81); 0.027	-0.28 (-0.68, 0.11) ;0.155	1.81 (0.89, 2.73);< 0.001
Renal disease	9.28 (5.26, 13.30);< 0.001	5.44 (2.62, 8.25);< 0.001	11.52 (3.46, 19.60); 0.005