

INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

FACTORS ASSOCIATED WITH UNSUPPRESSED VIRAL LOAD IN HIV-1-INFECTED PATIENTS ON FIRST LINE ANTIRETROVIRAL THERAPY IN MOROCCO

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Background: Unsuppressed viral load (VL) in patients on antiretroviral therapy (ART) is associated with increased HIV transmission and a decreased survival.

Objective: The aim of this study was to identify factors associated with unsuppressed VL (VL>400 copies/ml) in patients on first-line ART for 6 months attending the Dermatology Department of Rabat Military Hospital.

Materials and Methods: We retrospectively reviewed data of ART patients with a VL result recorded, who started ART between January 2007 and January 2017. The factors were identified using a multivariable logistic regression for unsuppressed VL.

Results: We included 181 patients (76% male) on first-line ART. Median age at ART start was 35 years. Adjusting for other variables, factors significantly associated with having an unsuppressed VL ($p<0,05$) included: male gender, initial fasting plasma glucose $>1,1\text{g/l}$, alcoholism, smoking and first VL >10000 copies/ml. By multivariate analysis, two factors were independently associated with unsuppressed VL, namely, smoking (RR: 4,27; IC 95%: 1,67 - 10,89) and first VL > 10000 (RR: 9,78; IC95%: 2,40 - 39,73).

Conclusion: Almost 83% of patients in the cohort had been able to suppress VL after 6 months of first-line ART. Smoking and elevated first VL must be recorded, as they significantly were associated independently with unsuppressed VL. There is a need to develop and evaluate targeted interventions for ART patients in care who are at high risk of unsuppressed VL.