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Introduction/Objectives: The risk of cardiovascular disease is elevated among people living with HIV (PLHIV), particularly the occurrence of coronary artery disease and stroke. This study aimed to assess mortality and cardiovascular events among PLHIV followed at the Reference Center in Salvador, Bahia.

Methods: This retrospective cohort included PLHIV aged ≥ 18 years who underwent cardiovascular risk assessment using the Framingham Score (FS) in 2012. Outcomes of interest were stroke, angina, acute myocardial infarction (AMI), thrombosis, and death occurring up to December 31, 2023. Participants were stratified as FS ≥ 10% (moderate/high risk, Group 1) and FS < 10% (low risk, Group 2). Clinical, sociodemographic, and laboratory data were extracted from medical records and analyzed in R Studio. Descriptive and inferential statistics were applied (Pearson's chi-square test, relative risk [RR], and Kaplan-Meier survival analysis). The study was approved by the SESAB Research Ethics Committee.

Results: A total of 440 individuals were included, mean age 42.3 (± 10.1) years, 52.0% male. At baseline, 15.0% were hypertensive, 12.5% had dyslipidemia, 7.5% had diabetes mellitus, and 17.3% reported smoking. Mean follow-up duration was 2,620 days. At follow-up, 112 events occurred: 2.7% stroke, 1.8% AMI, 1.4% angina, 0.5% thrombosis, and 18.75% all-cause deaths. Group 1 comprised 31 (7.0%) individuals (FS ≥ 10%), among whom 7 (22.6%) experienced cardiovascular events and 8 (25.8%) died. In Group 2 (low risk), mortality was 18.6%, and 5.1% experienced events. The risk of events or death in Group 1 was twice as high (RR 2.0; 95% CI: 1.4–3.1; $p < 0.01$) compared with Group 2. For events alone, risk was 4.4 times higher (RR 4.4; 95% CI: 2.1–9.5; $p < 0.01$).

Conclusion: High mortality and elevated incidence of cardiovascular events were found in this population. The Framingham Score proved useful but underestimated the identification of individuals most prone to events. Results highlight the importance of monitoring and managing cardiovascular risk factors in PLHIV and underscore the need for complementary risk-assessment tools for this population.

Keywords: Cardiovascular Risk, Framingham Score, HIV/AIDS.

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LONG-TERM VIROLOGICAL IMPACT AND TOLERABILITY AFTER SWITCHING ANTIRETROVIRAL THERAPY TO DOLUTEGRAVIR (DTG)-BASED REGIMENS: REAL-WORLD DATA FROM SALVADOR, BAHIA

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Introduction/Objectives: The Brazilian Ministry of Health adopted dolutegravir (DTG) as first-line therapy for HIV and recommended switching antiretroviral regimens (ARVs) to DTG-based combinations in stable, virologically suppressed people living with HIV (PLHIV) to improve adherence, tolerability, and reduce adverse effects. This study evaluated the long-term virological impact and tolerability of switching to DTG-based regimens over 240 weeks of follow-up in Salvador, Bahia.

Methods: This was a longitudinal retrospective cohort study involving PLHIV who switched to DTG-containing regimens in 2018, followed until 2023 at a state reference center in Bahia. Inclusion criteria: age ≥ 18 years, undetectable viral load before switch, and post-switch viral load data available. Variables analyzed included viral load (real-time PCR, undetectable < 40 copies/mL; virological failure > 200 copies/mL), treatment adherence (percentage of dispensations in 12 months), and sociodemographic and clinical data from records. Analyses were conducted in R Studio (2020). This research is part of the ECOAH cohort, approved by the SESAB Ethics Committee.

Results: A total of 240 PLHIV were included; mean age 47.1 years, 68.3% male, 85.4% from Salvador. Mean duration since HIV diagnosis was 10.5 (± 5.3) years; mean ARV use before switch was 9.0 (± 4.9) years. In 2018, 100% had undetectable viral load, decreasing to 95.4% in 2023. Low ARV adherence increased from 11.7% (2018) to 15.4% (2023). Virological failure episodes were observed throughout follow-up (5.8%), associated with non-adherence but without evidence of resistance. Virological failure rates (VL > 200 copies/mL) were: 1.7% at week 48, 1.3% at week 96, 2.9% at weeks 144 and 192, and 4.6% at week 240. Five (2.1%) cases required switching from DTG due to adverse reactions, and eight (3.3%) discontinued treatment.

Conclusion: Switching to dolutegravir demonstrated high virological efficacy over 240 weeks; however, a decline in adherence levels and challenges in maintaining viral suppression were observed. These results highlight the importance of continuous monitoring and individualized strategies to ensure treatment safety and efficacy among people living with HIV.

Keywords: Dolutegravir, Antiretroviral Therapy, Stable Switch.

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