Hematologic alterations and early mortality in a cohort of HIV positive African patients

Fausto Ciccacci¹, Francesca Lucaroni², Roberto Latagliata³, Laura Morciano², Elisa Mondlane⁴, Moises Balama⁵, Dyna Tembo⁶, Jane Gondwe⁷, Leonardo Palombi⁸, Maria Cristina Marazzi⁹

¹UniCamillus, Saint Camillus International University of Health Sciences, Rome, Italy, ²Department of Biomedicine and Prevention, University or Rome Tor Vergata, Rome, Italy, ³Hematology, Department of Translational and Precision Medicine, University ‘Sapienza’ and Policlinico Umberto 1, Rome, Italy, ⁴DREAM program, Community of Sant’Egidio, Maputo, Mozambique, ⁵DREAM program, Community of Sant’Egidio, Beira, Mozambique, ⁶DREAM program, Community of Sant’Egidio, Blantyre, Malawi, ⁷LUMSA, Rome, Italy

In Development dx.doi.org/10.17504/protocols.io.bcdfis3n

Fausto Ciccacci

Feb 10, 2020

ABSTRACT

Infection with Human Immunodeficiency Virus (HIV) is highly prevalent worldwide, especially in Sub-Saharan Africa, where anaemia is also widespread. HIV infection is known to be associated with anaemia and various other haematologic alterations, but little data on correlation with immunological and virologic conditions in treatment-naive patients is available. To investigate these associations, we conducted a retrospective analysis of baseline data (general details, nutritional status, full blood count and HIV infection progress data) and 12 months follow-up status for HIV+ adult patients in 22 health facilities in Malawi and Mozambique.

Among the 22,657 patients included, we found associations of sex, nutritional status, CD4 count, and VL with anaemia, leukopenia, and thrombocytopenia. Also, any cytopenia was present in 1/3 of patients with normal nutritional status and less advanced HIV infection, and it wouldn’t be diagnosed in a basic HIV care setting.

Moreover anaemia, lower Red blood cells and platelets counts correlated with mortality in the first year of care, independently by BMI, Hb, CD4 count and VL.

Our results emphasize the need for including a full blood count in the routine HIV care services in Sub-Saharan Africa.

THIS PROTOCOL ACCOMPANIES THE FOLLOWING PUBLICATION

Hematologic alterations and early mortality in a cohort of HIV positive African patients

ATTACHMENTS

Hematologic alterations and early mortality in a cohort of HIV positive African patients.xlsx