

Altered leucocyte chemotaxis function in HIV subjects

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The primary function of leucocytes is believed to have been altered in HIV infection which culminates in the breakdown of the innate body defences mechanism. In order to establish this view and the process by which these functionalities are altered, a preliminary study of 600 blood samples comprising of 200 obtained from subjects with HIV infection (newly diagnosed and not on drugs), 200 from HIV subjects undergoing treatment and 200 from seronegative normal controls were studied for chemotaxis activities. Leucocyte chemotactic activity which includes measures of adhesion, filterability and mobility was done using an improved Boyden technique (1992) as demonstrated by this study. Statistical analysis were done using Micro Call Origin 5.0 version. Leucocytes chemotactic activities revealed that newly diagnosed HIV subject but not on drugs and sero-positive HIV subject on drugs recorded significantly lower chemotactic indices when compared with controls ($P < 0.05$, respectively), while the subjects undergoing treatment showed a significantly increased level of chemotaxis when compared with the newly diagnosed and untreated ones ($P < 0.05$, respectively). We conclude that Leucocytes during HIV infection have their chemotaxis activity inhibited in both newly diagnosed subjects as well as those on treatment. The levels of inhibition of chemotactic function however, were significantly enhanced in subjects undergoing treatment. The need for early therapeutic interventions in HIV infected subjects is hereby re-iterated.

Biography

Nuhu Andrew Yashim studied Medical Laboratory Science at Ahmadu Bello University, Zaria, Nigeria and graduated with a professional degree in Haematology. He also completed his M.Sc. in Haematology at Ambrose Alli University and currently rounding up his Ph.D. program at Rivers state University of Science and Technology. He is an Assistant Chief Medical Laboratory Scientist with the National Hospital, Abuja.

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