10th World Congress on VIROLOGY AND MYCOLOGY

May 11-12, 2017 Singapore

Immunological and virological discordance in patients on antiretroviral therapy: Still a grey area in HIV research

Ganesh Shanmugasundaram Anusuya Sree Balaji Medical College and Hospital, India

Statement of the Problem: Effective ART generally results in immune reconstitution with increased CD4 and virologic suppression with undetectable HIV viral load (VL). However a major concern regarding ART is when there is a discordant response between CD4 count and the viral load. There are two types of discordant responses: Immunological failure (decrease in CD4 count) despite VL suppression or immune reconstitution (increase in CD4 count) despite VL failure. Interestingly both types of discordant responses to ART are related to AIDS defining events and mortality.

Discussion: The discordant response to ART is still a grey area in HIV research. Several studies done around the world have shown the prevalence of discordance ranging from 8% to more than 20%. Several causes attributed for discordant response were Zidovudine based regimen, protease inhibitors, older age, younger median age, lower baseline CD4 count, associated opportunistic infections and baseline viral loads. The wide differences in prevalence of discordance can be attributed to several factors including different criteria for immunological response, virologic suppression, sample size, variation in time to failure, ethnic background and importantly different types of ART regimens. We also recommend the global HIV related authorities to implement uniform guidelines for immunological and virological response, so that the wide difference attributed to the prevalence of discordance can be assessed and decided whether it is a true difference in prevalence. These discordant groups need to be carefully monitored for opportunistic infections and more studies are needed as to ways to improve the immunologic response in these patients and also to find out the exact cause of discordance. Further studies like exploring the genetic sequencing of this discordant group is required.

Biography

Ganesh Shanmugasundaram Anusuya has been working in the field of HIV/AIDS since 2006 in India. He has worked as Tamil Nadu State AIDS Control (TANSACS) STI Medical Officer, ART Medical Officer and HIV Community Care Centre Medical Officer. After Undergraduation, he completed his fellowship in HIV Medicine from Government Hospital of Thoracic Medicine (GHTM), Tambaram, which is a Centre of Excellence for HIV treatment, care and support in India. He has been selected as best outgoing fellow and worked as Chief Fellow in International Training and Education Centre for Health, India. Subsequently, he completed his MD in Community Medicine from Sree Balaji Medical College and Hospital (SBMCH), Bharath University, Chennai. He was the first person as Principal Investigator to study about discordant response to ART in patients enrolled in a Government programme in India. He has done international presentations of his research work in Africa, UK, India, France, and in USA with many publications. He has been nominated by GHTM and SBMCH for the SAARC Prize on HIV/AIDS 2016 pertaining to his contributions in HIV research, undergraduate & postgraduate teaching, in-charge of free medical camp activities, guiding PhD candidates, conducting conferences, CME, and Public health awareness programmes in SBMCH as an Assistant Professor in Community Medicine department.

drgany2007@rediffmail.com

Notes: