

# 3<sup>rd</sup> International Conference and Exhibition on Pharmacovigilance & Clinical Trials

October 27-29, 2014 Hyderabad International Convention Centre, India

## Case report: Use of hydroxychloroquine in Immune Reconstitution Inflammatory Syndrome (IRIS)

A Pramod Kumar  
JSS University, India

Immune reconstitution inflammatory syndrome (IRIS) is an inflammatory reaction in HIV infected patients after initiation of antiretroviral therapy (ART). The etiology is unknown but it is thought to be a reactivation of suppressed immune system to specific infectious or non infectious antigens after profound suppression by the HIV. A 26-year-old lady who is a known case of HIV since 2009 (base line CD4 650 cells/mm<sup>3</sup>) was started with ART on 22/05/13 (CD4 125 cells/mm<sup>3</sup>) with AZT+LMV+EFV was admitted with headache, fever, body ache for 15 days with exertional breathlessness and cough on 19/10/13. Her chest examination showed bilateral rhonchi with crepts and diagnosed as highly reactive airway disease (HRAD) with paradoxical TB IRIS. Her past medical history was notable for TB, which had been treating since two months with Antitubercular drugs Isoniazid 300 mg, Rifampicin 450 mg, Pyrazinamide 1500 mg, and Ethambutol 800 mg once daily. Patient was treated symptomatically but did not recovered, and then patient was started with chloroquine 250 mg OD, over the next 6 days and the patient became afebrile and was rapidly improved symptomatically. The antimalarial drug hydroxychloroquine (HCQ) is able to have immune modulatory effects including the reduction of inflammatory cytokine production and of immunoglobulin (IgG) levels, and a down-modulation of natural killer cell activity; these properties have warranted its use in some of the autoimmune conditions. Based on these findings, the use of HCQ has been evaluated in HIV infection. Results showed that decreases in viral load, IL-6, and serum IgG titers, as well as a reduction of immune activation and a decrease of CD38+CD8+ T cell and Ki-67 memory CD4+ T cells can be observed in HIV infected patients receiving HCQ.

### Biography

A Pramod Kumar presently works as a Research Scholar in JSS College of Pharmacy, JSS University, Mysore, since 2013 and completed Masters in Pharmacy Practice and also qualified with PG Dip. His area of interests is Pharmacovigilance and evidence based medicine.

[pramod\\_pharmacist@yahoo.com](mailto:pramod_pharmacist@yahoo.com)