Two years CD4 count follow-up of rural patients on antiretroviral therapy: A study in Government Hospital

Sir,

Antiretroviral treatment centers are life line for HIV-infected poor patients, and hence Maharashtra AIDS Control Society has set up Antiretroviral Treatment Centers in Government hospitals in Maharashtra. In S.B.H. Government Medical College, Dhule, it was started on 03.07.2006. It is situated in Civil Hospital Campus. It caters to the needs of patients from Dhule and Nandurbar. Patients have rural and tribal background. Estimation of CD4 cell count remains the primary monitoring tool in assessing efficacy or failure of antiretroviral therapy (ART) under national program conditions in India.¹

Very few references are available on CD4 count of patients taking treatment in an ART centers in Government Medical Colleges. Reported cases are few and for a shorter duration in most of the studies.²,³ Hence we are reporting the evaluation of CD4 count after 2 years of follow-up.

A total of 204 patients who were initiated ART at this center were followed-up for their CD4 count values for 2 years. CD4 count estimation was performed on Partec Cyflow machine with single platform technology. Eight patients were lost to follow-up at the end of the 3rd CD4 count and 54 patients were lost to follow-up at the end of 4th CD4 count. Status of these patients was not known. Thus remaining 142 patients were analyzed for their CD4 count at the end of 2 years after their 4th CD4 count.

Median CD4 count for these patients was 137 cells/µL at the beginning of the treatment. After completion of 2 years on ART their median CD4 count was 365 cells/µL showing a median rise of 220 cells/µL in CD4 count in 2 years.

A consistent rise in CD4 count at all four CD4 follow-ups was observed in a total of 135 patients. Twenty patients were co-infected with tuberculosis. A lowest count of 4 cells/µL was noticed in this group and the patient was alive and well after 4th CD4 count follow-up.
up. One patient had consistent CD4 count of 49–51 in all four CD4 count follow-ups.

Six patients showed decrease in CD4 count after initiation of ART. Out of 6 patients, 1 was co-infected with tuberculosis. Ormaasan et al, have also reported poor CD4 cell recovery or no increase in CD4 count in a few patients on ART in their studies.[4]

Patients, who showed decrease in CD4 in spite of being on ART, need more evaluation. The direct relationship between HIV replication and CD4 lymphocyte count reduction was reported by Staszewski et al.[5] Hence viral load must be calculated in these patients. At present this facility is not available in ART center. Drug resistance study should also be done. This will prevent the emergence of drug-resistant HIV strains. One patient who showed constant CD4 count after treatment also needs to be investigated.

These data summarize the functioning of ART center in Dhule, Maharashtra. Data presented from all Government Medical Colleges will represent the true fate of ART for poor and needy people living with HIV/AIDS.

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