

Mucocutaneous manifestations in HIV patients and their relation with CD4 counts

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Background

Dermatological manifestations are seen at every stage of HIV/AIDS, and are often the presenting features. These manifestations not only act as markers but also reflect the underlying immune status. This study is an attempt to observe the various mucocutaneous manifestations and the corresponding CD4 counts. This study also included the comparison of mucocutaneous manifestations between patients on antiretroviral therapy (ART) and those who are not on ART (treatment naive cases).

Objectives

To examine the relationship between various skin diseases and CD4 cell counts in a hospital-based cohort of HIV-infected patients visiting ART centre of King George hospital; and To compare mucocutaneous manifestations between patients on antiretroviral therapy and those who are not on ART.

Methodology

Cross-sectional study of HIV-infected patients with mucocutaneous manifestations coming to ART centre of King George hospital, Visakhapatnam was conducted from May to July, 2011. The study involved 200 HIV positive patients of which 100 were on ART presenting with some mucocutaneous manifestations and 100 were not on ART consisting of patients who presented with a symptom of one of the mucocutaneous lesions. After

they were tested they were found to be positive and were included in the study. Before involving the patient in the study, a written informed consent was obtained from the patient or from patient's parent/legal guardian. Appropriate lab investigations were done to all patients including baseline investigations. The data collected was tabulated and analyzed using Microsoft excel.

Results

Among all the infections in both the categories, fungal were found to be most common (49%). A decrease in fungal infections was seen in ART patients with the initiation of ART therapy. But the bacterial (23%), viral (25%) and miscellaneous infections had almost same prevalence in both the categories. Pruritic papular eruptions (36%) was the leading presenting complaint. This was followed by oral candidiasis (33%), dermatophytes (21%) and herpes zoster (10%) which was mostly multidermatomal. Majority of the lesions were seen at the cell counts less than 200cells/mm³. The study was comparable to many Indian and foreign studies.

Conclusion

There is a strong negative association between CD4 counts and the incidence and severity of skin disease in the HIV/AIDS patients. Fluctuations in CD4 levels observed during skin disease require further studies to establish the underlying pathophysiology. When dermatological lesions of patients who are on ART were compared with that of non-ART, there was significant reduction in the prevalence of dermatological viral infection in on ART patients. But prevalence of bacterial and fungal infections showed no change. This may be due to poor socioeconomic status and poor hygiene.