STUDIES

MUCOCUTANEOUS DISORDERS IN HIV POSITIVE PATIENTS

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Twenty eight HIV positive patients were included in this study. They were evaluated for their mucocutaneous disorders, sexually transmitted diseases and other systemic disorders between 1994-95 in the department of Dermatology and STD, Dr R M L Hospital of New Delhi. The heterosexual contact with commercial sex workers (CSWs) was the most common route of HIV transmission. Chancroid, syphilis and genital warts were common STDs found in HIV positive patients. Oral thrush (67.9%) was the commonest mucocutaneous disorder found in these patients followed by herpes zoster (25%) and seborrhoeic dermatitis (21.4%). There was no unusual clinical presentation seen in mucocutaneous disorders and STDs.

Key Words : Sexually transmitted diseases, HIV infection, Mucocutaneous disorders

Introduction

HIV infection has been associated with cutaneous diseases since it was first described with kaposi's sarcoma as a diagnostic criterion.[1] As the AIDS epidemic has grown, several skin diseases have an increased prevalence in patients with AIDS. Centers for disease control (CDC)[2] have defined criterion for the diagnosis and classification of the spectrum of syndromes caused by this virus. The revised CDC classification system for HIV infected adolescents and adults categorizes person on the basis of clinical condition associated with HIV infection and CD4+ T-lymphocyte counts (more than 500, 200-499, and less than 200 cells/μl) and three clinical categories (A,B,C) and is represented by a matrix of 9 exclusive categories. Several skin diseases are not only more prevalent in HIV infected persons but often are more severe and chronic and they represent a spectrum of progressive immunodeficiency with concurrent decrease in T-cell helper/suppressor ratio.[4,5] The venereal transmission of HIV can occur in homosexual, heterosexual and sex partners of high risk group members. The association of genital ulcer diseases and HIV infection is quite strong. Sexually transmitted diseases act as an important cofactor in increasing the risk of transmission of HIV infection through sexual contact.[3]

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Materials and Methords

The study population consists of 28 HIV positive patients registered during a period of 2 years (1994-95) in the department of Dermatology and STD, Dr Ram Manohar Lohia Hospital, New Delhi. Of the 28 patients, 18 were detected in Dermatology and STD clinics and 10 were referred from the medicine department by the National consultant (NACO) for their mucocutaneous problems. All the patients were clinically evaluated by a panel of dermato-venereologists, who were aware of HIV antibody status of the patients at the time of examination. The diagnosis of dermato-venereological diseases was based on the clinical appearance of lesion and on the

finding obtained by special procedures when necessory. The potassium hydroxide (KOH) preparataion was used to confirm the diagnosis of oral candidiasis, tinea versicolor, tinea corporis, balanoposthitis, intertrigo and vulvovaginitis. The Tzanck smear was used to confirm the diagnosis of herpes zoster. Skin biopsy was done, whenever necessary, to confirm the clinical diagnosis. For confirmation of genital ulcer diseases and other STDs, gram-staining, dark ground microscopy, VDRL test and other necessary investigations including biopsy were performed.

Results

All twenty eight cases (23 male and 5 female) were serologically positive by ELISA using combined HIV-I and HIV II antigen kits and western blot tests. The routes of contracting STDs and HIV infection were as follows (Table I) : 64.2% patients had

Table I. Probable route of HIV transmission

Route of HIV transmission	No. of patients	%
Heterosexual	18	64.2
Blood transfusion	9	32.1
Unknown	1	3.57

heterosexual contact with CSWs, 32.14% through infected blood transfusion and rest one case (3.6%) denied any history of blood transfusion, sexual contact or intravenous drug abuse.

Table II shows the pattern of STDs in

Table II. Sexually transmitted diseases in HIV positive patients

STD	No. of patients	%
Chancroid	3	10.7
Syphilis	2	7.1
Genital warts	2	7.1
Herpes progenitalis	1	3.6

HIV infected patients, 10.7% had chancroid, 7.1% each had syphilis and genital warts and 3.6% had herpes progenitalis. The various mucocutaneous disorders diagnosed in those cases are presented in table III. Of the 7

Table III. Dermatological disorders in HIV positive patients

SN	Dermatological diseases	No. of patients (%)
1.	FUNGAL	
	Oral thrush	19 (67.9)
	Tinea corporis	4 (14.28)
	Monilial intertrigo	1 (3.6)
	Monilial balanoposthitis	4 (14.3)
2.	VIRAL	
	Herpes zoster	7 (25.0)
	Molluscum contagiosum	1 (3.6)
3.	BACTERIAL	
	Recurrent pyoderma	2 (7.42)
	Folliculitis	1 (3.6)
	Gangrenous ulcer of penis	1 (3.6)
4.	Seborrhoeic dermatitis	6 (21.4)
5.	Psoriasis	2 (7.4)
6.	Eosinophilic pustular follculitis	4 (14.3)
7.	Dryness of skin	3 (10.7)
8.	Scars and keloid	3 (10.7)
9.	Diffuse hyperpigmentation	1 (3.6)
10.	Acneform eruption	1 (3.6)
11.	Exfoliation of skin	1 (3.6)
12.	Kaposi's sarcoma	1 (3.6)

herpes zoster patients, one young heterosexual male had two epsiodes of herpes zoster at different segments within a span of one year. Although his lesions healed in 4 weeks with scarring and keloid formation, severe post herpetic neuralagia persisted for more than 1 year.

Generalized lymphadenopathy was found in 28.6% of cases, systemic illness like persistent fever for more than 1 month was observed in 42.8% of cases, persistent diarrhoea for more than 1 month in 28.6% cases and weight loss of more than 10% of body weigh was found in 50% of cases. Other

systemic illness like pulmonary tuberculosis was detected in 21.4% cases and cysticercosis of brain was diagnosed in 3.6% of cases.

Discussion

The infectious diseases are the largest category of cutaneous disorders associated with HIV infection. The majority of these infections are either fungal or viral. Folliculitis, impetigo and cutaneous protozoal infections are also seen in HIV infection.[6,7] In the present study the majority of patients also had fungal and viral infections. Oral candidiasis and herpes zoster were found more frequently in these cases as observed in other studies.[8,9] These conditions could be the diagnostic criteria for the HIV infection.[8]

The relationship between HIV infection and STDs appears to be both, highly dynamic and synergistic. In genital ulcer diseases presence of ulcer could foster HIV transmission.[3] The STDs like chancroid, syphilis and genital warts were observed in HIV positive individuals of our series. However, we could not come across any abnormal clinical presentations of either of these STDs or any other mucocutaneous disorders in these HIV infected cases. The incidence of these mucocutaneous disorders is quite high among our HIV positive patients as compared to that in general population.

Although it seems certain that persons with HIV infection have an increased incidence of mucocutaneous diseases, it is unclear whether the observed increase is associated directly with HIV infection or with the progressive immunodeficiency as seen in these individuals. Kaplan et al[4] found that a bulk of dermal disorders seen in this viral disease occur when the T-helper cells number fall below 100 cells/cumm, but we could not measure the CD4 and CD8 cells count in all our cases due to lack of facility in this hospital.

To conclude, while dealing with cases having oral thrush, extensive psoriasis, tinea corporis and seborrhoeic dermatitis and multidermatomal and recurrent herpes zoster, the dermato-venereologist should be extra vigilant of HIV infection in these cases. HIV antibody testing should be advised after adequate pretest counselling.

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