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SHORT COMMUNICATIONS

DERMATOLOGICAL MANIFESTATIONS OF HUMAN IMMUNODEFICIENCY VIRUS INFECTED/ACQUIRED IMMUNODEFICIENCY SYNDROME PATIENTS IN A REFERRAL HOSPITAL OF CENTRAL KERALA

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A number of skin diseases are described in association with HIV infection/AIDS. In the present study the frequency of various skin manifestations among HIV infected/ AIDS patients are noted. Generalised pruritus and dry skin were the common manifestations encountered. There was a significant absence of Kaposi's sarcoma, multi-dermatomal herpes zoster and oral hairy leukoplakia. A prominent hyperpigmented band on finger nails was seen.

Introduction

Since the discovery of Human Immunodeficiency Virus (HIV) infection, a number of skin diseases are described in association with it. Among the first few cases of HIV infection, Kaposi's sarcoma was described as the classical skin manifestation of AIDS.[1] Later on other diseases like bacillary angiomatosis,[2] pruritic papules, various infections were noted. Cutaneous infections with bacteria, fungi[3] and viruses[4] are described in increasing frequency in AIDS patients. It has become increasingly recongised that many HIV related inflammatory dermatoses may be unusual. A prospective study was conducted to note the frequency of skin diseases of HIV infected/AIDS patients attending various departments of medical college hospital from July 1992 to June 1994.

Materials and Methods

Patients who were having antibody positive by two different methods of screening tests (ELISA and particle aggiutination) at the same time were considered to be having HIV infection. In a few cases Western blot test for HIV was also done. CD_4+ count was not done because of technical reasons. The patients were examined clinically by two qualified dermatologists separately and the findings noted.

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Results

The total number of patients was 60. The patients belonged to both sexes (M=54, F=6). The ages of patients ranged from 23 to 41 years. Except one patient all had extra marital/pre-marital hetero-sexual activity. None of these patients had homosexuality. One of these patients had multiple blood transfusion (unscreened) following head injury.

The most common presentation was dryness of skin (100%) and lustreless hair (100%) (Table I). The next common presentation was one to two millimeter broad hyper-pigmented longitudinal bands in finger nails. This was seen in 25% patients who were also having pulmonary tuberculosis in addition to HIV infection. Other uncommon findings are shown in Table I.

Discussion

A number of cutaneous manifestations are described in persons with HIV infection.

Table I.

Skin lesions	No. of patients (%)	
Dry skin	60	(100%)
Lustreless hair	60	(100%)
Hyperpigmented nail band	15	(25%)
Acne vulgaris	6	(10%)
Oral candidiasis	6	(10%)
Seborrhoea - like lesion	4	(6.7%)
Exaggerated insect bite reaction	1	(1.7%)
Fungal infection	4	(6.7%)
Viral infection	1	(1.7%)
Pyoderma	1	(1.7%)
Vasculitic ulcers	2	(3.3%)
Hyperpigmentation	5	(8.3%)
Parapsoriasis	1	(1.7%)
Herpes genitalis	1	(1.7%)

The skin changes are mostly attributable to the alteration in immune function.[5]

In the present study the most common skin manifestations, the dryness of skin and lustreless hair, were seen in all patients. This could be a secondary change attributable to the nutritional status of the patients. Infection with various agents is seen in only 7 patients (11.7%). The reported prevalence of infection with herpes simplex virus (HSV), varicella zoster virus (VZV), cytomegalovirus (CMV) and Epstien-Barr Virus (EBV) ranges from between 20% and 40% to virtually 100%.[6] It is mentioned that mucocutaneous lesions of HSV are by far the most common manifestation in AIDS.[6] In the present study there was only one case of HSV (genital) infection and a striking absence of VZV infection. The dermatophyte infections are very common in AIDS patients and are reported to affect 30-50% of this population.[7] The present study shows only 6.7% patients with fungal infections of various sites. The clinical presentation of fungal infection was typical of that area of body and comparable with any other immunocompetent individual. Cutaneous hypersensitivity vasculitis is described in HIV infection.[8] Two of our patients showed similar lesions.

The nails of 25% of the patients showed 1 to 2 mm broad longitudinal hyperpigmented bands. All these patients were having tuberculosis (either pulmonary or extra-pulmonary). This particular skin manifestation is not so far described in HIV setting. All these bands were of recent onset and first they appeared in 1 or 2 fingers as faint line and gradually deepened and broadened as the disease progressed. In terminally ill patients many nails were involved.

There are striking differences in the pattern of dermatological disease from those described in Western literature. Since we did not do the CD4+ cell count in the patients, we are unable to comment on the immunological status of the patients. But the striking absence of Kaposi's sarcoma, bacillary angiomatosis and decreased prevalence of other cutaneous viral infections and the presence of "nail band sign" points to a different pattern at least in our population with HIV infection.

Reference

1. Stickler MC, Friedman Kien AE. Kaposi's sarcoma. Clin Dermatol 1991, 9 : 39-47.
2. Webster GF. Bacillary (epitheloid) angiomatosis. Clin Dermatol 1991; 9: 75-7.
3. Angeles AM. Fungal and mycobacterial skin infections. Clin Dermatol 1991; 9: 65-9.
4. Williams LR, Guy Webster G. Warts and molluscum contagiosum. Clin Dermatol 1991; 9: 87-93.
5. Highet AS, Kurtz J. Human immuno deficiency virus. In : Text Book of Dermatology (RH Champion, JL Burton, FJG Ebling, eds), 5th edn. London : Blackwell scientific publication, 1991; 919-31.
6. Berger T. Herpes virus infection and HIV disease. Clin Dermatol 1991; 9: 79-85.
7. Goodman DS, Teplized, Wishner A, et al. Prevalence of cutaneous disease in patients with acquired immunodeficiency syndrome (AIDS) or AIDS - related complex. J Am Acad Dermatol 1987; 2: 210-20.
8. Sadice NS, Mc Nutt NS. Cutaneous hypersensitivity reactions in patients with AIDS. Int J Dermatol 1993; 32: 621-6.