

To Seek the Hidden Monster

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Abstract: Problem statement: The asymptomatic stage of HIV infection is dealt with in detail in all Dermatology books. Patients in this stage present with skin lesions that occur even in the immunocompetent. However when these lesions recur, are atypical, aggressive or unresponsive to treatment, it is worthwhile to go back into the history to ascertain if there is a history of high risk behavior. **Approach:** To identify patients in the asymptomatic stage of retroviral infection, from benign looking skin lesions and to create a scheme for index of suspicion for HIV infection. To evolve a protocol for the management of such patients. This is an ongoing study for the past 1 years. We have studied 125 patients whom we thought to be in the asymptomatic phase of retroviral infection. The cutaneous markers we looked for included seborrheic dermatitis, verrucous warts, pruritic papular eruptions, extensive dermatophyte infection, tinea versicolor and impetigo. **Results:** Certain skin diseases were found to be more prevalent than certain others and so was the combination of these skin diseases, along with the prevalence in various age groups. About 118 of our patients had a history of high risk behavior as the only link between retroviral infection and its skin manifestations. The statistical relevance and a protocol for management and social implications were worked out in detail. **Conclusion/Recommendations:** Recognizing the asymptomatic stage of retroviral infection, we think may contribute to its control in the society and also improve the quality of life in the infected persons. We reiterate to look out for the skin lesions per se or in combinations and to elicit high risk behavior in an empathetic, non judgmental and non moralistic way. To consider the link between HIV infection and HRB. An excellent opportunity to identify patients with HRB. Possible that they are HIV positive, hence counsel them.

Key words: HIV, skin, Mucocutaneous manifestation of HIV and high risk behavior

INTRODUCTION

It has been 28 years since Acquired Immune Deficiency Syndrome (AIDS) was first recognized as a distinctive syndrome but a cure is yet to be found. Dermatological involvement is one of the earliest manifestations in HIV and was first recognized even before the causative virus was identified (Shobhana *et al.*, 2004; Bunker and Gotch, 2004). Also recognizing the patient in the asymptomatic phase of HIV infection is of foremost importance and its one of the biggest challenges a dermatologist faces. The asymptomatic stage of HIV infection is dealt with in detail in all Dermatology books and patients in this stage present with skin lesions that occur even in the immunocompetent. However when these lesions recur, are atypical, aggressive or unresponsive to treatment, it is worthwhile to go back into the history to ascertain if there is a history of high risk behavior. The aim of

present study was to identify patients in the asymptomatic stage of retroviral infection, from benign looking skin lesions and to create a scheme for index of high suspicion for HIV infection. We also wanted to evolve a protocol for the management of such patients.

MATERIALS AND METHODS

This is an ongoing study for the past 1 year in all patients attending our OPD, who had dermatological conditions that recurred, were atypical, aggressive or unresponsive to treatment. Patients who were already HIV positive or on any immunosuppressants were excluded from present study. We have studied 125 patients as of now during the presentation of this study, whom we thought to be in the asymptomatic phase of retroviral infection. A detailed history was taken from each patients with thorough mucocutaneous and general examination. History of high risk behavior, mode of

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transmission of infection, marital status, whether the spouse had any high risk behavior or was HIV positive and if the partner has died due to any infection were all noted during the detailed history taking. The cutaneous markers we looked for included seborrheic dermatitis, verrucous warts, pruritic papular eruptions, extensive dermatophyte infection, tinea versicolor and impetigo. HIV testing was done on few patients who gave consent for the testing after pretest counseling, which was followed by post test counseling and those patients who refused HIV testing, it was not done. We do not do HIV testing as routine in our department.

RESULTS

Certain skin diseases were found to be more prevalent than certain others and so was the combination of these skin diseases, along with the prevalence in various age groups. Present study included 125 patients in which 76 (60.8%) of them were males and 49 (39.2%) of them were females. About 109 of them had High Risk Behavior (HRB) of 1st degree (87.2%), while 9 of them has HRB of 2nd degree (7.2%).

The youngest patient in present study was 13 years old who gave a history of repeated sexual abuse while the oldest patient in present study was 58 years old. The majority of our patients belonged to the age group of 18-30 years (41.6%), while the 2nd biggest age group was 31-40 which had 38 patients (30.4%). Table 1 shows the demographic characteristic of present study recruitee.

The predominant mode of transmission was heterosexual (78.4%, which is 98 patients) while 20 patients (16%) were homosexual. 7 patients in our study were bisexual (5.6%).

The spouse of 2 patients had died due to pulmonary tuberculosis while 4 patients were undergoing treatment for pulmonary tuberculosis.

We did HIV testing by Tridot method in 34 patients who gave consent for HIV testing and 18 of them turned out to be HIV positive (52.9%). Unfortunately due to the social stigma and scare associated with the disease many patients refused to take the test in spite of pretest counseling, but almost 53% of the tested patients turned out to HIV positive, which is a very significant number. This result reiterates the need to have a high index of suspicion especially when assessing high risk patients.

The most common finding was dermatophytosis which included dermatophyte infections in various sites

of the body. It accounted for 22 patients (17.6%), while the next common finding was angular chelitis, 20 patients (16%). Table 2 shows the common mucocutaneous features we observed. Many of the skin lesions were in combination and the most common combinations were dermatophyte infection with tinea versicolor, 18 patients, dermatophyte infection with pyoderma, 15 cases, oral and genital candidiasis, 10 cases.

Generalized lymph node enlargement was found in 102 of our patients (81.6%).

Some other notably interesting findings that we found were ciliary hypertrichosis in 40 of our patients (32%) and pigmentation of the buccal mucosa and gingiva in 14 patients (11.2%).

All the patients were managed previously by dermatologists as regular skin cases and possibility of high risk behavior was not considered even though they appeared to have recurrence or resistance to treatment. The fact that these conditions may be the clinical manifestation of HIV was no considered in the past.

Table 1: Demographic characteristic of present study recruitee (No: 125)

Age group	No. of patients
<18	3
18-30	52
31-40	38
41-50	18
>50	14

Table 2: Common mucocutaneous features that we observed

	Number	Percentage
Oral lesions		
Candidiasis	18	14.4
Aphthous stomatitis	8	6.4
Herpes simplex	9	7.2
Angular chelitis	20	16.0
Pigmentation of the tongue	6	4.8
Cutaneous lesions		
Dermatophytosis	22	17.6
Tinea versicolor	19	15.2
Genital candidiasis	12	9.2
Herpes progenitalis	11	8.8
Multidermatomal or recurrent herpes zoster	4	3.2
Recurrent scabies	6	4.8
Molluscum contagiosum	9	7.2
Extensive verruca vulgaris	8	6.4
Pyoderma	17	13.6
Extensive psoriasis	5	4.0
Seborrhoeic dermatitis	7	5.6
Papular urticaria including pruritic papular eruptions	10	8.0
Prurigo nodularis	3	2.4
Acquired ichthyosis	8	6.4
TEN, SJS or FDE	4	3.2
Xerosis	16	12.8

DISCUSSION

Many doctors still fail to suspect that a patient presenting with a common dermatosis known to be associated with HIV infection, might be HIV positive. There are times when a patient declines to take the test due to the social stigma associated with the disease, hence at that time all a treating dermatologist or physician has to offer would be to treat the patient symptomatically. However, earlier diagnosis is of great benefit to the patient as he or she can be counseled regarding ways to improve his quality of life and to maintain a healthy lifestyle. Considering this we suggest that all patients who present with skin disease known to be associated with HIV, if they recurred, were atypical, aggressive or unresponsive to treatment be assessed with a high index of suspicion (Jindal *et al.*, 2009; Hira *et al.*, 1988; Jensen *et al.*, 2000; Bunker, 1996; Rico *et al.*, 1997). We don't do HIV testing as routine in our department as at this point of time there is nothing much we have to offer them besides counseling regarding ways to improve their quality of life. They should be counseled regarding the disease, suspecting each one of them to be possibly HIV positive, as this is the main population of patients who are responsible for the spread of the disease. The common scenario is usually evaluation of a patient known to be HIV positive for various manifestations of the disease or dermatological symptoms and the physician tries to assess if it's due to disease per se or due to the treatment.

The significance of a detailed history taking also has to be emphasized as this is the only way to elicit a history of high risk behavior. It has been found from present study that 118 (94.4%) of our patients had history of HRB or either 1st or 2nd degree. This was the only relation between benign looking skin lesions that could occur in healthy individuals and those who were HIV positive. Also the number of patients having HRB and having skin lesions cannot be ignored as sheer coincidence.

We counseled all our patients regarding HIV, various risk reduction methods and prompt treatment of opportunistic disease. We also stressed upon the importance of proper nutrition and the dietary inclusion of fruits and vegetables in their diet. We advised our patients to consume whichever season fruit or vegetable available at that time of the year so that even patients from lower socio-economic class could afford it.

We thus suggest to look out for the skin lesions per se or in combinations (Perronne *et al.*, 1990; Sadick *et al.*, 1990; Severson and Tyring, 1999; Smith *et al.*, 2000; Vanhems *et al.*, 1999; Kahn and Walker, 1998;

Angeles, 1991; Goodman *et al.*, 1987; Colebunders *et al.*, 1998; Palella *et al.*, 1998) which maybe HIV associated in every individual patient that comes with a high index of suspicion and to elicit high risk behavior in an empathetic, non judgmental and non moralistic way as this could be the only means of diagnosing a patient in asymptomatic phase of retroviral infection.

CONCLUSION

We conclude that during the asymptomatic phase of HIV infection, benign looking skin lesions could be the only manifestation of HIV infection, hence any treating physician should have an index of high suspicion when treating such patients as this would improve the quality of life of the patient and also the spread of infection in the society. The link between HIV infection and HRB should not be ignored. It is also an excellent opportunity to identify patients with HRB and it's possible that they are HIV positive, hence counsel them.

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