

Profile of HIV Positive Patients with Mucocutaneous Lesions



Medical Science

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ABSTRACT

Cutaneous disorders are not only associated with terminal immunodeficiency but they occur throughout the course of HIV infection. More than 90% of patients with HIV infection develop skin or mucous membrane conditions at some time during the course of their disease, in many of these patients skin is the first and only organ affected. A Hospital based cross sectional study was carried out among 132 patients from outpatient department of a tertiary care hospital to study the profile of HIV positive patients with muco cutaneous lesions. The striking feature is that maximum number of patients i.e. 60 (45.5%) were in the age group of 31-40 years. Amongst females housewife (30/50) is the largest group having muco cutaneous lesions. One housewife had accepted Commercial Sex work as Secondary occupation. Among males Farmer (25/82) was the largest group. This data signifies the changing pattern of disease prevalence among common people and rural areas. Maximum number of patients (96.1%) had a previous history of some or other skin lesion, STD or Kochs. 18% patients had a history of STD.

Introduction:

Human immunodeficiency virus (HIV) disease is an infectious disease caused by Human Immunodeficiency Virus. Acquired immunodeficiency syndrome (AIDS) constitutes the advanced clinical stage of HIV disease. HIV infection/AIDS is a global pandemic, with cases being reported from virtually every country [1].

HIV infection produces a panorama of muco cutaneous manifestation, which may be the presenting features of the disease [2]. Cutaneous disorders are not only associated with terminal immunodeficiency but they occur throughout the course of HIV infection [3]. More than 90% of patients with HIV infection develop skin or mucous membrane conditions at some time during the course of their disease. In many of these patients skin is the first and only organ affected [4].

The present study was undertaken to study the profile of HIV positive patients with muco cutaneous lesions.

RESULTS:

TABLE 1: Demographic profile of patients

| Demographic profile | | Male (82) | Female (50) | Total (132) | Chi square and p value |
|---------------------|----------------|------------|-------------|-------------|--|
| Age | 21-30 | 16 (19.5%) | 30 (60%) | 46 (34.9%) | X ² = 24.02979; P<0.01; Significant |
| | 31-40 | 44 (53.6%) | 16 (32%) | 60 (45.5%) | |
| | 41-50 | 17 (20.7%) | 04 (8%) | 21 (16%) | |
| | 51-60 | 05 (6.09%) | 00 (0%) | 05 (3.78%) | |
| Marital status | Married | 79 (96.3) | 50 (100%) | 129 (97.8%) | X ² = 0.39; p>0.05; NS |
| | Unmarried | 03 (3.65%) | 0 (0%) | 03 (2.27%) | |
| Occupation | Farming | 25 (30.5%) | 07 (14%) | 32 (24.2%) | |
| | Housewife | - | 30 (60%) | 30 (22.7%) | |
| | Business | 05 (6.1%) | 01(2%) | 06 (4.5%) | |
| | Government Job | 05 (6.1%) | 01 (2%) | 06 (4.5%) | |
| | Private Job | 10 (12.2%) | 0 | 10 (7.6%) | |
| | Labourer | 13 (15.6%) | 03 (6%) | 16 (12.1%) | |
| | Driver | 09 (10.9%) | 0 | 09 (6.8%) | |
| | Social worker | 02 (2.4%) | - | 02 (1.5%) | |
| | Teacher | 02 (2.4%) | - | 02 (1.5%) | |
| | Others | 10 (12.2%) | - | 10 (7.6%) | |

Material and Methods

Type of study: Hospital based cross sectional study

Study period: March 2007 to October 2008

Sample size: 132 patients

Study settings: Outpatient department of a tertiary care Hospital

Ethical considerations: Institutional ethics committee permission was obtained. Informed consent was obtained from the patients.

METHODOLOGY:

The HIV positive patients with muco cutaneous lesions were identified. Their data pertaining to age, sex, education, occupation, marital status, history of sexual promiscuity and past history was recorded.

DATA ANALYSIS:

Data was analyzed using proportions and chi square test. P value less than 0.05 is considered as statistically significant.

The striking feature is that maximum number of patients i.e. 60 (45.5%) were in the age group of 31-40 years, followed by 46 (34.9%) patients in the age group of 21-30 years. (Statistically significant, P,0.01) There were 82 (62.1%) males and 50 (37.1%) females with a Male: Female ratio of 1.64:1. The average age was 35 + 8.1 years.

129 (97.8%) were married while 3 (2.27%) patients were unmarried.

Amongst females housewife (30/50) was the largest group having muco cutaneous lesions, followed by farmers (07/50) and labourer (3/50). Among males Farmer (25/82) was the largest group, followed by labourer (13/82) and private job (10/82).

Table 2: Mode of transmission of HIV infection

| Mode of transmission of HIV | Male | Female | Total |
|-----------------------------|------------|------------|-----------|
| Heterosexual | 56 (76.7%) | 43 (72.9%) | 99 (75%) |
| Homosexual | 02 (2.7%) | 00 (0%) | 02 (1.5%) |
| Bisexual | 03 (4.1%) | 01 (1.7%) | 04 (3%) |
| Parenteral | 04 (5.4%) | 03 (5.0%) | 07 (5.3%) |
| Indeterminate | 08 (10.9%) | 12 (20.3%) | 20 (15%) |
| Total | 73 | 59 | 132 |

99 (75%) patients, the mode of transmission of HIV was through heterosexual contact. 02 (1.5%) patients gave history of homosexuality while 4 (3%) patients were Bisexual.

TABLE 3: Past history of skin lesions, STD and Koch's in HIV positive patients

| Sr. No. | Skin lesion | Males (n=82) | Females (n=50) | Total (n=132) |
|---------|-------------------------|--------------|----------------|---------------|
| 1 | H/o Herpes zoster | 32 (39%) | 15 (30%) | 47 (35.6%) |
| 2 | H/o Measles | 0 | 01 (2%) | 01 (0.7%) |
| 3 | H/o Vaginal candidiasis | - | 01 (2%) | 01 (0.7%) |
| 4 | H/o Drug Rash | 02 (2.4%) | - | 02 (1.4%) |
| 5 | H/o S.T.D. | 14 (17%) | 04 (8%) | 18 (13.6%) |
| 6 | H/o Kochs | 27(32%) | 13 (26%) | 49 (37.12%) |
| 7 | H/o generalized itching | 02 (2.4%) | 04 (8%) | 06 (4.5%) |
| 8 | Onchomycosis | 02 (2.4%) | 0(0%) | 02 (1.4%) |
| 9 | Wart | 0 | 1 (2%) | 1 (0.7%) |
| Total | | 79(96.3%) | 39 (78%) | 127 (96.1%) |

Maximum number of patients (96.1%) had a previous history of some or other skin lesion, STD or Koch's. Herpes zoster was found in (35.6%) of patients, of which 3 patients gave history of recurrent infection, 2 had multi-dermatomal involvement, 1 had Herpes zoster ophthalmicus. It was followed by Kochs which was present in 49% patients with HIV. 18% patients had a history of STD.

DISCUSSION:

Of the total 132 patients studied, there were 82 (62.1%) males and 50 (37.1%) females with a Male: Female ratio of 1.64:1. Bhandary et al [5] reported that majority of patients belonged to the age group of 26-35 years. The M: F ratio in their study was 9.6:1. This may be due to their study comprising of very less number of patients as compared to the present study. Similarly Kumaraswamy et al [2] observed that 49.6% of patients were of 18-30 years. The M: F ratio (2.4:1) observed by them is also similar to the present study. Male predominance was also reported by Shobhana et al [6]. The reported mean age of 29 years and the M: F ratio of 2.5:1 in their study is comparable with the present study. Thus, the demographic profile of the HIV positive patients in the present study is comparable with that reported in various Indian studies.

Mode of transmission of HIV:

The mode of transmission of HIV in 75% of patients was through heterosexual contact. 02 (1.5%) patients gave history of homosexuality. 15% patients did not give any history regarding homo/hetero/bisexuality/blood transfusion or repeated intramuscular injections and were classed as indeterminate. But considering the social setting in India it is possible that, they had heterosexual contact in the past but did not reveal on questioning.

Heterosexual contact was reported as the common mode of transmission of HIV infection in 59 (98.3%) patients by Criton et al [7]. Kumarswamy et al [2] reported that in majority (85.5%) of their patients, the route of transmission of HIV was through heterosexual contact. Shobhana et al [6] concluded that heterosexual contact was the predominant mode of transmission of HIV infection. Thus various studies in India have reported that the predominant mode of transmission of HIV infection is through heterosexual contact as is observed in the present study.

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