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To Study the Clinical Profile of HIV/AIDS Patients at ART Center Bikaner

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#### Abstract

Haematological **Background:** abnormalities are common findings in patients infected by HIV virus. The common findings include anemia, leukopenia, thrombocytopenia or pancytopenia These abnormalities may be attributable to the direct cytotoxic effect of the virus on progenitor cells, ineffective hematopoiesis, opportunistic infections, immune mechanisms, and drug reactions.

**Methods:** It was an observational study including 200 HIV positive patients who were willing to be a part of the study. According to the WHO case definition, HIV in adults and children 18 months or older is diagnosed based on positive HIV antibody testing (rapid or laboratory-based enzyme immunoassay).

**Results:** In this study Fever was the predominant symptom seen in 77% of cases; followed by weight loss (56%), Cough with expectorants (36%), Haemoptysis (35%), long fever (34%).

**Conclusion:** The present study found that most of the HIV infected patients were from sexually active age group. Emphasizing the need to strengthen our

Information education and communication (IEC) strategies to contain HIV/AIDS.

**Keywords:** Acquired Immuno Deficiency Syndrome (AIDS), Hematological manifestations, Clinical profile.

### Introduction

Haematological abnormalities are common findings in patients infected by HIV virus. The common findings include anaemia, leucopoenia, thrombocytopenia or pancytopenia. These abnormalities may be attributable to the direct cytotoxic effect of the virus on progenitor cells, ineffective hematopoiesis, opportunistic infections, immune mechanisms, and drug reactions.<sup>1</sup>

Anemia is a very common finding in HIV infected patients, particularly in individuals with more advanced disease. HIV infection without alone other complicating illness can produce anemia in some patients. HIV not only causes low CD4 counts, but is also associated with granulocytopenia thrombocytopenia, loss of specific cytotoxic lymphocytes, and antibody specific response<sup>2</sup>.

Most patients will experience some hepatobiliary manifestations during the course of their HIV disease, with abnormal liver function in approximately 80% patients and hepatomegaly and jaundice in 50% patients . HIV can involve the liver directly as demonstrated by presence of HIV P24 in kupfer cells and endothelial cells, and presence of HIV messanger RNA in hepatocytes . The degree of involvement of liver can be demonstrated by measuring alkaline phosphatase, alanine amino transferase, aspartate amino transferase, lactate dehydrogenase, creatinine phosphokinase<sup>3</sup>

Renal disorders are encountered at all stages of HIV infection, & range from from fluid & electrolyte imbalances commonly seen in hospitalised patients to HIV associated nephropathy which can progress rapidly to end stage renal disease.

#### **Material And Methods**

#### Place of study

Inpatient and outpatient departments of department of General medicine at S P medical college, Bikaner (Rajasthan)

### Study design

It was a hospital based observational descriptive study.

#### Sample size

The sample size was 100 patients.

### Sampling method

Connivance sampling

### **Duration of study**

Eight year between 2010 to 2018

### **Inclusion Criteria**

1. The patients diagnosed with HIV-1 reactive by ELISA method (both symptomatic and asymptomatic)

2. age >18 years.

### **Exclusion Criteria**

1. Patients with previously known hematological disorder prior to HIV infection

2. Patients with hepatic disorders and renal disorders due to other causes was be excluded from the study

### Study population

All the patients who are HIV positive and fulfilling the inclusion and exclusion criteria attending OPD and IPD.

## **Data collection**

All the patients who are HIV positive and fulfilling the inclusion and exclusion criteria attending OPD and IPD.The patients was evaluated according to predetermined and pretested proforma to record the details of history , physical examination and investigations.

### Observation

Table 1: Age wise distribution of AIDS patients

Age group (Yrs)	No. of patients	Percentage
10-20	6	3%
21-30	38	19%
31-40	48	24%
41-50	50	25%
51-60	24	12%
More than 60	34	17%
Total	200	100%

Maximum 25% patients were belong to 41-50 Yrs age

group and only 3% patients were less than 20 Yrs.

Table 2: Sex wise distribution of AIDS patients

Sex	No. of patients	Percentage
Male	154	77%
Female	46	23%
Total	200	100%

77% patients were male and 23% were female.

# Table 3: Religion wise distribution of AIDS patients

Religion	No. of patients	Percentage
Hindu	194	97%
Muslim	06	3%
Total	200	100%

97% patients were hindu and 3% were muslim.

Table 4: Marital status wise distribution of AIDSpatients

Marital status	No. of patients	Percentage
Married	192	96%
Unmarried	8	4%
Total	200	100%

96% patients were married and 4% were unmarried.

Table 5: Education wise distribution of AIDS patients

Education	No. of patients	Percentage
Illiterate	24	12%
Primary	88	44%
Secondary	32	16%
Graduate	34	17%
Post graduate	22	11%
Total	100	100%

44 % patients were educated up to primary level.

 Table 6: Occupation wise distribution of AIDS patients

Occupation	No. of patients	Percentage
Farmer	54	27%
House wife	16	8%
Shop keeper	44	22%
Laborer	82	41%
Student	2	1%
Driver	2	1%
Total	200	100%

Maximum 41% patients were laborer and only 1% patients was student and driver.

Table 7: Clinical symptoms wise distribution of AIDS patients (n=200)

Clinical	No. of patients	Percentage
symptoms		
Fever	154	77%
Vomiting	36	18%
Diarrohea	72	36%
Headache	42	21%

Cough with	72	36%
expectorants		
Weight loss	112	56%
Long fever	68	34%
Haemoptysis	70	35%

In this study Fever was the predominant symptom seen in 77% of cases; followed by weight loss (56%), Cough with expectorants (36%), Haemoptysis (35%), long fever(34%).

Table 8: Physical finding wise distribution of AIDS patients (n=200)

Physical finding	No. of patients	Percentage
Pallor	72	36%
Jaundice	30	15%
Clubbing	62	31%
Generalized	68	34%
lymphadenopathy		
Oral candidiasis	56	28%
Skin lesion	20	10%

In this study Physical findings included pallor (36%), generalized lymphadenopathy (34%), clubbing (31%),oral candidiasis (28%),jaundice (15%) and skin lesions (10%).

### Discussion

In our study, maximum 25% patients were belong to 41-50 Yrs age group and only 3% patients were less than 20 Yrs.

Studies done by Sitalakshmi et al, <sup>4</sup> was observed that maximum numbers of patients belonged to 41-50years of age group. Chanarat et al. <sup>5</sup> also reported similar age group distribution.

Bartholomew Okecuhukwu Ibeh et  $al^4$  was observed the ages of the HIV<sup>+</sup> HAART group  $36 \pm 10$  Yrs.

Males were more commonly affected by the disease (77%) than female (23%) in our study.

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Sitalakshmi et al, 5 was observed that male (60%) and female Was (40%).

Chanarat et al, <sup>6</sup> was also observed that male was more effected than female.

In this study Fever was the predominant symptom seen in 77% of cases; followed by weight loss (56%), Cough with expectorants (36%), Haemoptysis (35%), long fever(34%).

The study done by Sitalakshmi et al,<sup>7</sup> most common symptom was weight loss (59%) and vomiting (46%).

M Bhanu Kumar et al  $^{8}$  was observed that the common symptoms among these patients were fever (79%), weight loss (64%), and oral thrush (24%).

In the study by Chanarat et al, <sup>2</sup> most common symptom was weight loss (60%).

The study conducted by Ramakrishna et  $al^4$  Fever was the predominant symptom seen in 59% of cases; followed by weight loss (53%).

In this study Physical findings included pallor (36%), generalized lymphadenopathy (34%), clubbing (31%), oral candidiasis (28%), jaundice (15%) and skin lesions (10%).

The study conducted by Ramakrishna et al<sup>4</sup> founded that anemia (54%), oral candidiasis (30%), generalized lymphadenopathy (25%), and skin lesions (15%).

### Conclusions

The present study found that most of the HIV infected patients were from sexually active age group. Emphasizing the need to strengthen our Information education and communication (IEC) strategies to contain HIV/AIDS.

#### References

 Sitalaxmi S , Srikrishna A ,Damodar P.Hematological changes in HIV infection.Indian J Pathol Microbiol 2003;46(2):180-3

- Chanrat N ,Chanarat P.Bio-chemical & Haematological manifestations of HIV/AIDS in Chiang-Mai Thailand,Southeast Asian J Trop Med Public Health .2001 Sep;32(3):400-3
- Billah MM,Islam KMD,Ahsan MM et al.Transmission , biochemical manifestation & CD4 Cell Count HIV:Pakistan J BIOLOGICAL SCIENCES;7(2):292-300.
- Ramakrishna , Venkata Venu Gopala Raju. correlation of hematological and biochemical parameters to severity of disease in acquired immuno deficiency syndrome.IMTU,2015:12-15.
- Swati Kathuria. Hematological Manifestations in HIV Infected Patients and Correlation with CD4 Counts and Anti Retroviral Therapy.IJCMR;3(2):2453-6.
- Housset C, Boucher O, Girard PM et al. Immunohistochemical evidence for human immunodeficiency virus-1 infection of liver Kupffer cells. *Hum Pathol.* 1990;21:404-8.
- Sitalakshmi, S., Srikrishna, A., and Damodar, P. Hematological changes in HIV infection. Indian J Pathol Microbiol. 2003; 46: 180-183.
- Kumar BM, Thippeswamy T, Shankar R, Prathima C. Hematological Abnormalities in Early and Advanced HIV Infection Patients. Int J Sci Stud 2016;3(11):1-5.