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Original Article

**Study on Various types of presentations in AIDS patients in Terminal illness**

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**Abstract:**

**Introduction:** After 2-10 years of infection, many patients progress to symptomatic stage, and land with a variety of manifestations depending upon the systems involved and severity of disease and rapidity of immunodeficiency. Hence the present study was under taken to evaluate the various types of clinical presentations of AIDS patients in "terminal stage illness".

**Materials and Methods:** All patients are confirmed cases of HIV / AIDS , with multisystemic involvement and presented with various type of clinical manifestations. Special case proforma was made to record complaints, history, clinical features, investigations, diagnosis and preliminary data was also recorded, for each case separately.

**Results:** Tuberculosis is the most common presentation among HIV patients in respiratory system. 66% were suffering HIV TB co-infection, 4% were suffering from pneumocystis carinii pneumonia and Bacterial pneumonia each. In relation to Gastrointestinal system, 54% patients had Oro pharyngeal candidiasis, 18% patients had diarrhoea.

**Conclusion:** Knowing Clinical manifestations of HIV is very essential as because it helps to diagnose and to start accurate treatment. Also aid to study the prevalence of various diseases associated with HIV.

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**Key words:** Clinical Manifestations, HIV, Terminal illness

**INTRODUCTION**

Human Immunodeficiency virus (HIV) infection, the end result of which is acquired Immuno Deficiency Syndrome (AIDS), is of the most fatal health problem. It has proved itself to be entirely different from any previously and presently know diseases.

In a span of 24 years, HIV infection became a pandemic and has posed a formidable challenge to the mankind in almost all aspects of life. The pandemic evolved in four broad phases of emergence, Dissemination, Escalation and stabilization. Now it is stabilized as a major health and social problem creating ubiquitous poverty. It was estimated that by the end of 2004, about 40 -46 millions of people were infected with HIV. More than 3 million people died in the entire world and today more than 16,000 people are newly infected every day. Out of this, 90% of the infected people live in the developing world i.e., most of them in sub-saharan Africa, south east Asia and eastern Europe [1].

HIV infection does not affect one organ (or) one system, but practically affects all the tissues and organs of the human body. The back ground of the AIDS is the deregulation of the

cellular immune system caused by HIV infection, which permits pathogenic activity on the part of a host of Bacteria, Virus, parasites and Oncogenic agents.

After 2-10 years of infection, many patients progress to symptomatic stage, and land with a variety of manifestations depending upon the systems involved and severity of disease and rapidity of immunodeficiency[2].

Most of the patients develop dermatological infections like Multidromal Herpes zoster, and some develop cryptococcal meningitis, CMV retinitis and AIDS dementia complex, Neoplasms like kaposis sarcoma, which results in to death if not treated properly [3].

Hence the present study was under taken to evaluate the various types of clinical presentations of AIDS patients in "terminal stage illness".

**MATERIALS AND METHODS**

This study is comprised of 50 cases of HIV / AIDS patients, who are screened and confirmed by voluntary counselling and

testing centre (VCTC) at Rajiv Gandhi Institute Medical Sciences, attended to the Department of Dermatology, Venereology and Leprology from September 2016 to February 2017 (6 months).

All 50 patients are admitted in the STD ward and examined and investigated thoroughly. All patients are confirmed cases of HIV / AIDS, with multisystemic involvement and presented with various type of clinical manifestations. Special case proforma was made to record complaints, history, clinical features, investigations, diagnosis and preliminary data was also recorded, for each case separately.

At first, detailed history was taken and general examination was done. All systems i.e., RS, CVS, CNS, GIT, Skin etc., were examined properly and details noted in the proforma.

All patients investigated with Blood investigations like, Complete Hemogram, VDRL, CD4 / CD 8 cell counts, Liver function tests, Renal function tests, chest X-ray, USG abdomen, Urine examination and special investigations like CT Scan, Barium meal, KOH mount for fungal elements, Tzanck Smear, culture and sensitivity, grams staining, FNAC for lymph nodes, CSF examination, stool examination, ECG, Echocardiogram etc. were done for required cases.

**Inclusion Criteria:**

Patients diagnosed to be HIV positive with:

1. CD 4 cell count less than 200cell /mm<sup>3</sup>
2. Total lymphocytes count less than 1200 cells/ mm<sup>3</sup>
3. AIDS defining clinical manifestations.

All patients with CD 4 cell count than 200 cells/ mm<sup>3</sup> are taken in to consideration as terminal stage of HIV infection, and same patients were examined systemically and findings entered into the proforma.

**RESULTS**

Clinical features related to HIV were presented here according to systems. A total of 50 patients were included in the study. Tuberculosis is the most common presentation among HIV patients in respiratory system. 66% were suffering HIV TB co-infection, 4% were suffering from pneumocystis carinii pneumonia and Bacterial pneumonia each.

Sl No.	Diagnosis	Male	Fem ale	Tot al	%
<b>RESPIRATORY SYSTEM</b>					
1	A. Pulmonary tuberculosis	16	5	21	42
	B. Extra pulmonary T.B	9	3	12	24
	Total	25	8	33	66
2	PCP (Pneumo Cytis carinii Pneumonia)	2	-	2	4
3	Bacterial pneumonia	-	1	1	4

In relation to Gastrointestinal system, 54% patients had Oro pharyngeal candidiasis, 18% patients had diarrhoea caused by

cryptosporidia, Entamoeba histolytica. 12% presented with Ascitis, 2% had TB abdomen and Hepatitis B each. All patients admitted were treated, and one of the male patient expired during the treatment. Mortality rate was being 2%.

<b>GASTROINTESTINAL SYSTEM</b>					
1	Oro-pharyngeal candidiasis	21	6	27	54
2	Diarrhea	7 2 9			
	a) Cryptosporidial (5)				
	b) E. Histolytica (2)				
	c) Un Known etiology (2)				
3	TB Abdomen	1	-	1	2
4	Ascitis	5	1	6	12
5	Hepatitis – B	1	-	1	2

On assessing central nervous system clinical features among HIV patients, 4% of patients presented with cryptococcal meningitis, 4% had psychiatric manifestations. 2% patients presented with different manifestations each including Toxoplasmosis, TB meningitis, TB granuloma, Cerebral malaria, sensory neural deafness.

<b>CENTRAL NERVOUS SYSTEM</b>					
1	Cryptococcal Meningitis	2	-	2	4
2	Toxoplasmosis	1	-	1	2
3	TB Meningitis	1	-	1	2
4	TB Granuloma	1	-	1	2
5	Cerebral Malaria	1	-	1	2
6	Psychiatric manifestation	2	-	2	4
7	Sensory Neural deafness	1	-	1	2

Dermatological manifestations prevalence was 10% presented with Herpes simplex infection, 6% had Dermatophytosis, 4% had Herpes zoster, 2% had S.J. syndrome, Molluscum contagiosum, Skin TB each.

<b>DERMATOLOGY</b>					
1	Herpes simplex infection	3	2	5	10
2	Herpes Zoster	1	1	2	4
3	S.J. Syndrome	1	-	1	2
4	Molluscum Contagiosum	1	-	1	2
5	Dermatophytosis	2	1	3	6
6	Skin TB (Scrofuloderma)	1	-	1	2

Other clinical manifestations noticed among HIV patients, 4% had CMV retinitis and lymphomas, 2% had cardiomegaly and TB pericardial effusion with cardiomyopathy.

1	CMV Retinitis	2	-	2	4
2	Cardiomegaly	1	-	1	2
3	TB Pericardial effusion with cardio myopathy	1	-	1	2
4	Lymphomas	2	-	2	4

**DISCUSSION**

AIDS manifests as recurrent, severe, and occasionally life-threatening infections and/or opportunistic malignancies. The signs and symptoms are those of the presenting illness, meaning that HIV infection should be suspected as an

underlying illness when unusual infections present in apparently healthy individuals.

Tuberculosis is the most common presentation among HIV patients in respiratory system. 66% were suffering HIV TB co-infection, 4% were suffering from pneumocystis carinii pneumonia and Bacterial pneumonia each in the present study.

P. Carinii pneumonia is the second most common opportunistic disease (21,4%) in a study done by Sead Ahmetagic [4], which is similar to many reports from around the world [5,6]. A study from kumaraswamy [7] found the prevalence of PCP to be 4%. A NACO study [8] in 2002 found the prevalence of 24%. This increasing tendency of PCP may be due to increased endemicity of PCP in India.

In this study, among Gastrointestinal system disorders, 54% patients had Oro pharyngeal candidiasis, 18% patients had diarrhoea caused by cryptosporidia, Entamoeba histolytica. 12% presented with Ascitis, 2% had TB abdomen and Hepatitis B each. Candidiasis is often registered in HIV infected patients as shown in numerous of reports from many other countries [5,6]. Kumaraswamy study showed [7] 58% of oropharyngeal candidiasis. 53% prevalence observed by NACO study [8].

In this study, on assessing central nervous system clinical features among HIV patients, 4% of patients presented with cryptococcal meningitis, 4% had psychiatric manifestations. 2% patients presented with different manifestations each including Toxoplasmosis, TB meningitis, TB granuloma, Cerebral malaria, sensory neural deafness. Kumaraswamy [7] showed 3% of cryptococcal meningitis, 7.4% of Toxoplasmosis. Guptha et al [9] documented incidence of 8.8% cryptococcal meningitis, 3.8% of Toxoplasmosis.

Primary HIV syndrome or HIV seroconversion illness, Acute Retroviral syndrome (ARVS) is defined as the group of clinical manifestations characterising acute HIV infection, which is described by Australian researchers during an early epidemic in 1980s [10]. They described an acute mononucleosis-like illness accompanied by fevers, sweats, malaise, lethargy, anorexia, nausea, myalgia, arthralgia, headache, sore throat, diarrhoea, lymphadenopathy and rash.

Many of the symptoms of disease described in the intermediate and late stage of infection which were extremely problematic to treat, such as molluscum contagiosum, necrotising ulcerative periodontitis and seborrhoeic dermatitis are uncommon in treated populations.

HIV is increasing in the world is mainly due to increase in number of sexual partners. It was a good observation that Blood products transfusion of HIV has come down because of introduction of blood donor screening in many of the public health sectors.

Antiretroviral therapy has also led to a decreased incidence of some HIV-associated malignancies such as Kaposi sarcoma and AIDS-related non-Hodgkin lymphoma.[11-14] However the effect of ART on other malignancies, such as Hodgkin disease, human papilloma virus-associated tumours including

invasive cervical carcinoma and anal carcinoma, is less clear with no significant change in incidence [15]. All HIV-associated malignancies remain increased in the population with HIV compared with the population without HIV [16], although these data are largely from the pre-ART era.

## CONCLUSION

Knowing Clinical manifestations of HIV is very essential as because it helps to diagnose and to start accurate treatment. Also aid to study the prevalence of various diseases associated with HIV. As India is endemic for TB, that maybe the reason for Tuberculosis was observed as the most common disease. Tuberculosis was most the prevalent diseases followed by oropharyngeal candidiasis.

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