

DEMOGRAPHIC PROFILE AND CLINICAL FEATURES OF ADMITTED HIV PATIENTS IN A TERTIARY CARE TEACHING HOSPITAL OF KARACHI - PAKISTAN

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Abstract

Objective: To find out the demographic profile and clinical features of HIV patient admitted in tertiary care hospital of Karachi

Methodology: All diagnosed HIV patients who required admitted care for their symptoms in Infectious Disease department of Civil Hospital, Karachi were included in this descriptive case series from January 2008 to March 2009. Patients were referred from Civil Hospital Emergency, Medical wards, Sexually Transmitted Disease (STD) clinic and Sindh Aids Control Program. Detailed history and clinical examination was performed and risk factors were evaluated.

Results: Total 52 patients were admitted during the study period which included 50 (96.2%) males and two (3.8%) females. Mean age \pm SD of the patients was 33.9 ± 9.5 years. Most common symptoms were weight loss in 31 (59.6%), fever in 22 (42.3%), diarrhea in 16 (30.8%) and chronic cough in 15 (28.8%) patients while the commonest sign was pallor in 33 (63.5%) followed by muscle wasting in 21 (40.4%) patients. Hepatomegaly was found in seven (13.5%) and lymphadenopathy in five (9.6%) patients. Commonest risk factor identified was history of blood transfusion in 48 (92.3%) patients followed by intravenous drug addiction in 19 (36.5%) and foreign travel in seven (13.5%) patients.

Conclusion: Majority of patients admitted with the diagnosis of HIV were males. Most common symptoms were weight loss, fever, diarrhea and chronic cough while pallor, muscle wasting, oedema and hepatomegaly were the frequent signs present. History of blood transfusion, IV drug user and foreign travel were important risk factors identified.

KEY WORDS: HIV, AIDS, Clinical features, Risk factors.

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INTRODUCTION

Clinically apparent human immunodeficiency virus (HIV) infection was first recognized in 1981 in homosexual men in New York City who presented with evidence of a profound acquired immune deficiency syndrome (AIDS).¹ Currently, more than 40 million people worldwide are infected with HIV/AIDS & more than 3.1 million AIDS-related deaths occur worldwide each year.² HIV infection has now spread to every country in the world. South Africa has an estimated 5.5 million people infected with HIV, which is by far the highest in the world.³

Many people with HIV do not know they are infected as many people do not develop symptoms after they first get infected with HIV while others have a flu-like illness within several days to weeks after exposure to the virus.⁴ Infection with the human immunodeficiency virus (HIV) ranges from asymptomatic sero-conversion to a severe symptomatic illness which can result in hospitalization.⁵ World AIDS Day campaign (December 1st) is aimed to raise awareness about AIDS.

Pakistan has finally started experiencing the epidemic of HIV/AIDS.⁶ The first case of AIDS infection in Pakistan was reported in 1987 in Lahore.⁷ Pakistan presently has a HIV/AIDS prevalence of 0.1 percent - equivalent to an estimated 80,000 HIV-positive adults.⁸ HIV has been reported in all four provinces of Pakistan, and its spread is predominantly through sexual contact, which accounts for 70% of registered HIV cases.⁸ Several socioeconomic conditions favorable to the spread of HIV exist in Pakistan, including poverty, low levels of education, and high unemployment, which lead to increased exposure to the disease via migration to higher prevalence countries. Despite the increasing prevalence of HIV in Pakistan, there is scarce knowledge about the spectrum of HIV-related diseases in the country. The clinical features and consequences of HIV infection observed in studies from developed countries cannot be generalized across the multiple virus subtypes that circulate in Asia in general and Pakistan in particular. This study was therefore conducted to determine the common signs and symptoms at presentation in HIV-infected individuals admitted in department of Infectious Disease, Civil Hospital Karachi so that every clinician should be aware of these features and proper and timely screening of HIV infection was performed.

METHODOLOGY

This descriptive case series was performed in department of Infectious Disease of Civil Hospital Karachi from January 2008 to March 2009. Civil Hospital, Karachi (CHK) is a 1670-bed tertiary care teaching hospital in the public sector

that imparts both undergraduate and post-graduate teaching and training. It is one of the teaching hospitals affiliated with Dow University of Health Sciences (DUHS). CHK attracts patients not only from Karachi but also from the rural areas of Sindh and Balochistan provinces.

All diagnosed HIV patients (previously diagnosed by ELISA test kit, Abbot) who required hospitalized care for their symptoms like severe diarrhea, recurrent chest infection, concurrent tuberculosis etc in Infectious Disease department of CHK were included in the study. Patients were referred from Civil Hospital Emergency, Medical wards, Sexually Transmitted Disease (STD) clinic and Sindh Aids Control Program. Detailed history and clinical examination was performed and risk factors were evaluated and collected in a specially designed proforma. Results were analyzed by SPSS version 10 with descriptive statistics.

RESULTS

Total 52 patients were admitted during the study period which included 50 (96.2%) males and two (3.8%) females. Mean age \pm SD of the patients was 33.9 ± 9.5 years (Range: 17-56 years). Thirty six patients (69.2%) were resident of rural areas while 16 (30.8%) were from urban areas.

Most common symptom patients complaints were weight loss in 31 (59.6%), fever in 22 (42.3%), diarrhea in 16 (30.8) and chronic cough in 15 (28.8%) patients while commonest sign was pallor in 33 (63.5%) followed by muscle wasting in 21 (40.4%). Hepatomegaly was found in seven (13.5%) while splenomegaly in 5 (9.6%) and lymphadenopathy in five (9.6%) patients Table-I.

Commonest risk factor indentified was history of blood transfusion in 48 (92.3%) patients followed by intravenous drug addiction in 19 (36.5%) patients Table-II.

DISCUSSION

HIV has the capability to affect every organ system in the body by direct damage by the virus or by rendering the host susceptible to

Table-I: Clinical features of admitted patients infected with HIV

Clinical Feature	N (%)
<i>Symptoms</i>	
Weight loss	31 (59.6)
Fever	22 (42.3)
Diarrhoea	16 (30.8)
Chronic Cough	15 (28.8)
Chest pain	7 (13.5)
Sputum	4 (7.7)
Change of voice	3 (5.8)
Hemoptysis	1 (1.9)
Night Sweat	1 (1.9)
<i>Signs</i>	
Pallor	33 (63.5)
Muscle wasting	21 (40.4)
Oedema	11 (21.2)
Hepatomegaly	7 (13.5)
Lymphadenopathy	5 (9.6)
Splenomegaly	5 (9.6)
Ascites	5 (9.6)
Finger Clubbing	1 (1.9)

opportunistic infections.¹ This study showed that the commonest symptoms experienced by admitted HIV patients was weight loss, fever, diarrhea and chronic cough while pallor, muscle wasting, oedema and hepatomegaly were the frequent signs present. One important finding of the study is that most of the patients had prior history of blood transfusion. This highlights the importance of having high index of suspicion in patients presenting with common but refractory symptoms to be worked up for the diagnosis of HIV infection.

A study from Nigeria showed that majority of patients had advanced immunosuppression at presentation, with fever, weight loss, diarrhea and skin lesions being the most common presenting events.⁹ Other study from Chinese children showed that weight loss was noted in 43 cases (65.2%), anemia in 42 cases (63.7%), fever in 40 (60.6%), fatigue in 38 (57.6%), rash in 31 cases (47.0%), chronic cough in 28 (12.1%), chronic diarrhea in 24 (36.4%), CNS involvement in 16 (24.2%), oral thrush in 13 (19.7%), and hepatosplenomegaly in 12 (18.2%) HIV infected patients.¹⁰ A recent study from India has reported clinical profile of 516 children

Table-II: Risk factors of patients infected with HIV

Risk factors	N (%)
History of Blood transfusion	48 (92.3)
IV drug abuser	19 (36.5)
History of Contact	16 (30.8)
History of TB	9 (17.3)
Foreign Travel	7 (13.5)
Tattooing	0 (0)
Accidental Needle stick injury	0 (0)

affected by HIV. In this study common clinical features were fever (36.6%), respiratory infections (31.7%), lymphadenopathy (30.0%), hepatosplenomegaly (21.8%) and diarrhoea (18.1%).¹¹ Our study showed one patient with finger clubbing. Similar findings were observed by Akolo C et al.¹² from Nigeria where they reported finger clubbing to be present in 8.5% of patients while other signs and symptoms of HIV/AIDS were similar to the rest of the world.

Only two patients in this study were females while it was reported in different studies that HIV is more common in females.⁹ Another study from Northern Balochistan about Prevalence of HIV infection in a healthy population reported that out of 35 positive HIV patients 97% were males and 3% females.¹³ We believe this difference is not due to increased prevalence of HIV in males in our country but due to our socio-economic condition wherein females usually do not consult physicians for their symptoms or report for screening and when they do present, they are reluctant to be admitted.

After blood transfusion, intravenous drug addiction was important risk factor identified in our study. According to the figures released by the National AIDS Control Program of Pakistan, the percentage of HIV infections among Karachi intravenous drug users had increased drastically between January 2003 and March 2005 from 0.4% to 26%.¹⁴ In mid-2005, HIV prevalence among intravenous drug users was 12% in Sargodha, 9.5% in Faisalabad, 24% in Quetta, and 8% in Larkana. Moreover, in Larkana, where Pakistan's first HIV outbreak among intravenous drug addicts was reported, the prevalence has increased to 27%.¹⁵ A study among IV drug abusers in Karachi and Rawalpindi found

only about half knew HIV could be transmitted through sharing of unclean needles.¹⁴

Foreign travel is another important risk factor noted in our study. Another study from Pakistan reported that around 70% of the total positive HIV cases from a sample of over 15,000 individuals over a period of six years (1986–1992) fell into this category of patients with foreign travel.¹⁶ The bulk of the infected individuals were deported workers from the Gulf States.¹⁵

Despite all these facts, our society has as yet not accepted HIV/AIDS as having anything to do with them. HIV is considered extremely shameful, particularly in the rural setting. Awareness about HIV/AIDS in general is extremely limited. A survey conducted among school teachers in Islamabad showed the severity of the condition. Sixty percent of the teachers said that ‘they thought HIV was irrelevant in our cultural setting.’¹⁷ This awareness and acceptance issue would indeed be a big challenge, because ‘teachers’ as well as ‘children’ will need to be taught. A study about awareness of AIDs in Medical students showed that majority of the students had good knowledge of definition, etiological agent and spread naming of lymphoid organs and cells but their knowledge was poor about the prevention and treatment of AIDS.¹⁸

CONCLUSION

Majority of patients admitted with the diagnosis of HIV were males. Most common symptoms were weight loss, fever, diarrhea and chronic cough while pallor, muscle wasting, oedema and hepatomegaly were the frequent signs present. History of blood transfusion, intravenous drug users and foreign travel were important risk factors.

There is need to educate our health care workers about common sign and symptoms of HIV infected patients and common risk factors for the early detection and proper management of HIV infected patients. More over there is need to create awareness by Media among general population about its risk factors so that rapid spread of this deadly disease is prevented.

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