

OTORHINOLARYNGOLOGIC ASSOCIATED FEATURES OF HIV/ AIDS PATIENTS IN ILE – IFE NIGERIA

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ABSTRACT

Objective: Symptoms and signs in Human Immune deficiency virus (HIV) infection and Acquired Immuno-Deficiency Syndrome (AIDS) patients are diverse; hence the presentations at hospitals are multichannelled. The pattern of presentation and treatment outcome in HIV / AIDS patients in our centre is presented.

Method: Twenty – two new patients referred to the otorhinolaryngology (ORL) clinic of Obafemi Awolowo University Teaching Hospital Complex (OAUTHC), Ile- Ife, screened and confirmed to be positive for HIV/ AIDS were retrospectively studied and followed up. All the patients consented to retroviral screening. The total number of patients seen during the study period also noted.

Results: Twenty- two patients made up of 7 males and females (M: F: 1:2) were studied. They constituted 0.7% of the 3000 patients seen in ORL clinic during the study period their ages ranged from 15 year to 59 year. Fifty – four percent of the patients were within age range 20 year to year. All the patients were sexually active; some confessing multiple sexual partners. Almost all professions, skilled and unskilled, were represented. Major clinical features were recorded. Treatment was mainly supportive: few patients could afford retroviral therapy. Over 50% of the patients defaulted for several reasons. Mortality rate was 18%.

Conclusion: The prevalence rate of 0.7% among new ORL cases in this study is high. Otorhinolaryngologists practicing in this environment must be well trained in the act of pre and post screening counseling, while precaution is taken against infecting themselves and their patients.

Keywords: HIV/AIDS, ORL, Nigeria.

INTRODUCTION

Acquired Immune deficiency Syndrome (AIDS), though first reported in 1981 in the United States of America¹ is now a global pandemic. About 42 million people worldwide are infected with human Immunodeficiency Virus (HIV)², which is believed to be the cause of AIDS^{3,4}. However, in the last decade the burden of the disease has been worse in sub-Saharan Africa with an estimated 29.4 million people were living with HIV / AIDS at the end of 2002². In Nigeria about 3.5 million people were estimated to be living with HIV/ AIDS by the 2001. A steady annual increase of about 0.8% of the national prevalence rate has also been noted in the past one decade⁵. Extensive studies have been done on the various modes of

clinical presentation and laboratory finding in various of HIV infection^{6,9}.

The disease affects all, systems of the body. It is characterized by immunosuppression with development of opportunistic infections and neoplasm. The clinical expression of HIV infection is thus very diverse and may also vary in different population according to the relative frequencies of other endemic and potential opportunistic infections⁶. Otorhinolaryngologic associated, of HIV/ AIDS patients have been documented.

These include infections conditions, neurological disorders and increased incidence of head and neck tumours¹¹. Patients attending the Otorhinolaryngology clinic of the Obafemi Awolowo University hospital, Ile-Ife, Nigeria had not been routinely screened for HIV infection until early 2000 when selection testing of the patients increasingly confirmed the disease in some of patients.

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This study details these associated features in these patients in the past 3 years (Years covered by the study).

MATERIALS AND METHODS

This is a retrospective study and subsequent follow up of new patients that presented at the E. N. T. clinic of Obafemi Awolowo University Teaching Hospital Complex, Ile- Ife, between January 2000 and December 2002 (3Years) and were found to be seropositive for HIV in the course of investigations. All the patients presented before they were confirmed to be HIV/ AIDS positive.

The age, sex, occupation, education status, marital status as well as number of sexual partners, the symptoms, diagnoses, the clinical investigations and the treatment outcome were noted for each patient.

The decision to screen was informed by a high index of suspicion based on the persistence or recurrence of symptoms and signs despite adequate treatment.

Disease confirmation was based on two positive results of screening tests using two different methods, namely, dip stick immunocomb and conventional enzyme linked immuno-sorbent assay (ELISA) according to standard and manufactures instructions. Procedural investigations also done on the patients include upper gastrointestinal endoscopy as indicated by peculiar symptoms. Most of the patients were referred to ENT clinic from the General out- patient Department of the hospital.

The data collected was analyzed using descriptive analysis and percentages.

RESULTS

A total of 22 patients were confirmed to have HIV/ AIDS within the three – year period there were seven males and fifteen females ratio 1:2. Their ages ranged between 14 – 59 years. Sixteen patients (73%) were between ages 20 and 49 years. (Table 1)

Presenting complaints: Table 2 shows the most common symptoms of ORL disease in this group of patients and the frequency of occurrence. Tinnitus (54.5%), weight loss (31.8%), hearing loss (31.8%) and skin rashes (27.3%) were the most common.

The summary of investigation is as on table 3. CD4 count was not done in most of these patients due to financial constraints. Two patients (9.1%) had their CD4 cell count done and it was less than 200/ micro litre for each of them.

Table 4 showed the most common diagnoses to be chronic suppurative otitis media (CSOM) (23.7%), chronic sinusitis (31.8%) Middle ear effusion (18.2%) and severe Epistaxis (13.6%)

The treatment options available to these patients were mainly supportive with antibiotics, antifungal, decongestants, anterior and posterior nasal packing as indicated in 2 (9.1%) of the patients, only 6 of the patients (27.3%) could afford anti- retroviral drugs comprising Lamivudine, Zidovudine and Nevirapine. Eighteen percent mortality rate (4 patients) was recorded in the patients studied.

Table 1: Age and Sex Distribution of HIV / AIDS ORL Patients

Age Range (Years)	Sex		
	Male (%)	Female (%)	Total (%)
10 - 19	2 (9.09)	2 (9.09)	4 (18.18)
20 – 29	1 (4.55)	5 (22.73)	6 (27.27)
30 – 39	2 (9.09)	4 (18.18)	6 (27.27)
40 – 49	2 (9.09)	2 (9.09)	4 (18.18)
50 – 59	-	2 (9.09)	2 (9.09)
TOTAL	7 (31.82)	15 (68.18)	22 (100)

Table 2: Presenting complaints

Complaints	Frequency	(%)
Tinnitus	12	(54.5)
Weight loss	7	(31.8)
Hearing loss	7	(31.8)
Skin rashes	6	(27.27)
Otorrhea	5	(22.7)
Nasal blockage	5	(22.7)
Otalgia	4	(18.2)
Epistaxis	3	(13.6)
Postnasal drip	3	(13.6)
Rhinorrhea	3	(13.6)
Dysphagia	2	(9.1)
Odynophagia	2	(9.1)
Neck swellings	2	(9.1)
Facial deformity	2	(9.1)
associated with vascular rashes		

Table 3: Summary of results of Investigation

Parameters	Frequency	(%)
Hematology		
Normal Hemogram	16	(72.7)
Severe Anemia	4	(18.2)
Pancytopenia	1	(4.5)
Thrombocytopenia	1	(4.5)
CD4 ⁺ count (count was <200/ ul for the patients)	2	(9.1)
Radiology		
Sinus Opacification (Bilaterl) Maxillary antral air fluid level	6	27.3)
(Audiology)		
Type B tympanogram	1	(4.5)
Hearing loss, with PTA average \geq 40dB	4	(18.2)
	4	(18.2)

Table 4: Summary of Diagnosis

Diagnoses	Frequency	(%)
Chronic suppurative otitis media	5	(22.7)
Chronic Sinustitis	7	(31.8)
Otomycosis Aspergillus Niger	1	(4.5)
Secretory Otitis Media with effusion (SOME) ⁺	4	(18.2)
Pulmonary Tuberculosis with Vestibulotoxicity	1	(4.5)
Severe Epistaxis	3	(13.6)
	1	(4.5)
Esophageal Thrush	2	(9.5)
Ramsay Hunts disease with facial nerve palsy		

⁺ Two of the patients with SOME also had chronic sinusitis

DISCUSSION

The otorhinolaryngologic complaints and clinical signs of HIV/AIDS patients have been variously reported¹¹⁻¹⁴. These include hearing loss in 3 – 62%, Otagia (50%), Otorhoea (31%), vertigo (15%) and tinnitus (15%). Up to 40 – 84% of HIV patients do have head and neck complaints or physical finding at initial presentation¹³. The prevalence rate of 0.7% in this present study could be an underestimate as not all patients were routinely screened. Stigmatization of

HIV/ AIDS patients and the high cost of conducting screening and confirmatory test are factors militating against routine screening of the large number of patients in our setting. Almost all occupational callings, skilled and unskilled were represented. Seventy seven percent (17 patients) were in the low socioeconomic class based on their occupation and educational status^{15,16}. It is said while HIV/ AIDS is not a disease of poverty, it flourishes in condition of poverty because poverty increases vulnerability to infection, and once infection. Poor people have fewer resources to cope with the burden of ill^{17,18}.

The disease continues to afflict the economically productive age group in the society with attendant grave socio- economic implications. In this review all patients were between 14 – 59 years, 73% of this were in the 20 -49 years group. All the patients were sexually exposed. Ten (45%) of the patients also admitted to having multiple sexual partners, this is in agreement with earlier studies highlighting heterosexual contact as the predominant mode of HIV transmission in sub – Saharan Africa¹⁰. Otitis Media and sinusitis have been found in up to 40% of patients with HIV disease and are the presenting illness in 10% of cases^{19,20}. In this study features of this infective condition are prominent in about 46% of the patients. The fact bilateral tinnitus was the commonest complaint in this study could be attributed to the high prevalence of middle ear infections.

Two out of the three patients with epistaxis presented with severe bleeding that necessitated massive blood transfusion. Thrombocytopenia and thrombocytopeny have been found in HIV patients. It is said that 3 – 12% have mild to moderate thrombocytopenia at presentation while the prevalence rise to 30 – 60% at the AIDS stage⁷. Also thromboplastin time has been reported⁸. A yet to be identified serum factor which prolongs bleeding time and derange platelet aggregation has been postulated⁹. There may contribute to the profuse bleeding despite a normal platelet count in these two (9%) patients.

Dysphagia and odynophagia were seen in 9% of the patients each while upper gastrointestinal endoscopy showed oesophageal thrush in 5% of the patients. It has been noted that esophageal symptoms in HIV / AIDS patients are usually due to infection with *Candida albicans*, Herpes simplex virus, and Cytomegalovirus among other. However, odynophagia resulting from herpes simplex or cytomegalovirus oesophagitis is said to be more severe²¹.

The effect of poverty on the management of HIV / AIDS in a developing country is evident in our study. With the advent of the Highly Active Antiretroviral

Therapy (HAART) using a combination of three drugs (Zidovudine, Lamivudine and Nevirapine). The cost of purchasing these drugs in Nigeria (N 11,000.00 Monthly) on a long – term basis is beyond the reach of many in the society. While a few patients could not afford to purchase the drugs at all, the majority of those who could buy the drug experienced financial difficulties after a few months. Availability of Anti retroviral drugs another big problem in developing countries. Throughout 2000- and early 2001 these drug were not available in our centre. Twelve (54%) did not have access to HAART due to financial constraints. These patients consume herbal/ traditional medicine in conjunction with the symptomatic orthodox medical treatment. Six (27%) of the patients are however still continuing with their drugs and follow – up clinic attendance. Availability of retroviral screening tests and antiretroviral drug at cheaper rates will definitely improve compliance and enhance better outcome in the these patients

The prevalence rate of HIV/ AIDS of 0.7% in ENT patients as seen in this study could be recommended that otorhinolaryngologists in this environment should assume that every patient that is seeking consultation is potentially HIV / AIDS infected and thus therefore take the necessary precaution to prevent further spread of the disease

REFERENCES

1. **Gottlieb, MS, Schroff, R, Schanker HM, Wesiman J. D.** Pneumocystis carinii pneumonia and mucosal candidiasis in previously healthy homosexual men: evidence of a new acquired cellular immunodeficiency. *N Eng J. Med* 1981; 305 1425 – 1431
2. **UNAIDS.** AIDS Epidemic Update. Geneva. UNAIDS and WHO. December 2002.
3. **Gallo S, Popovic M.** Frequent detection and Isolation of cytopathic retroviruses from patients with AIDS., *science* 1984; 224: 500- 504
4. **Barre – Sinoussi F, Chermann JC, Rey F.** Isolation of a T – lymphotropic retrovirus from a patient at risk for acquired immunodeficiency syndrome (AIDS) *Science* . 1983 ;220: 868 – 871
5. **The federal Ministry of health, Department of public Health.** National AIDS / STD Control Programme. A Technical Report on the 2001 National HIV / Syphilis sentinel survey among pregnant women attending ante natal clinics in Nigeria
6. **Ogun SA, Adelowo OO, familoni OB, Adefuye OB, Alebiosu C, Jaiyesimi AEA, Fakoya EAO, Odusan B, Odusoga OL, Oloa OO.** Spectrum and outcome of clinical disease in adults living with AIDS at the Ogun State University Teaching Hospital. *E. A. M. J.* 2003; 80: 513- 517.
7. **Scadden DT, Zon LJ, Groopman JE.** Pathophysiology and management of HIV associated hematological disorder. *Blood.* 1989;74: 1455 – 1463.
8. **Berard PE, Cooley TP.** Hematologic manifestations. In: Libman H and Wilzborg R. A (Eds) *HIV infection – A primary care manual*, 3rd edn. New York. Little, Brown and Company. 1996: 181 – 193.
9. **Ballen PJ, Belzberg A, Devine DV.** Kinetic studies of the mechanism of thrombocytopenia in patients with human immunodeficiency virus infection. *N. Eng. J. Med.* 1992; 327 : 1779 – 1784
10. **Akinsete I.** Clinical management of HIV / AIDS. *Nig. J of Med.* 1998; 7(1) : 16 – 20.
11. **Barzan L, Tavio MU, Commoretto R.** Head and neck manifestation during HIV infection. *J laryngol otol* 1993 ; 107 :133 – 136.
12. **Hausler R, Vibert D, Korálnic IL, Hirschel B.** Neuro – otological manifestations in different stages of HIV infection. *Acta otolaryngol Suppl.* 1991; 481: 515- 521.
13. **Kohan D, Rothstein SG, Cohen N.** Otolgic disease in patients with acquired immunodeficiency syndrome. *Ann oto Rhinol Laryngol* 1988; 97: 636 – 640.
14. **Linstroim CJ, Pincus RL, Leavitt EB, Urbina MC.** Otolgic neurotologic manifestations of HIV –related disease. *Otolaryngol Head Neck Surg* . 1993: 108: 680 – 687.
15. **Reid I.** Sociological perspective on school education. Open books publishing Ltd. Somerset. England. 1978: 257- 259.
16. **Olusanya O, Okpere E, Ezimokhari M.** The importance of social class in voluntary fertility

- control in a developing Country. West Afr. J. Med. 1985 ;4: 205- 212.
17. **Culks C, Floyd K, Haran D, Squire B, Wilkison D.** Sexual health and health care: care and support for people with HIV/ AIDS in resources poor settings London.DFepartment of Internatinal Development. 1998: 3- 192.
 18. **Adebayo RA, Oladoyin AM, Irinoye OO.** Comprehensive care for people living with HIV / AIDS : Issues and problems of social integration in Nigeria .Nig J. Med. 2003: 12: 12-21.
 19. **Zurlo JJ, Feuerstein JM, Lebovics R, Lane HC.** Sinusitis in HIV -1 infection AM J. Med 1992; 93 : 157- 162.
 20. **Godofsky EW, Zinreich J, Armstong M, Leslie J M, Weikel CS.** Sinusitis in HIV infected patients – A clinical radiologic review. AM. J. Med. 1992: 93: 163- 170.
 21. **Bonacini M, Young T, Kaube L.** The causes of esophageal symptoms in HIV infection. Arch Intern. Med. .1991; 151: 1567 - 1572.