

HIV Seroprevalence in Ophthalmic Surgery Patients at ESUT Teaching Hospital Enugu

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ABSTRACT

BACKGROUND: Many patients at high risk of contracting HIV infection may not seek voluntary counseling and testing but may have an unrelated ocular problem. The study aims to highlight the need to offer HIV voluntary counseling and testing services to ophthalmic surgery patients so that seropositive patients can be identified early and managed appropriately.

METHODS: The medical records of patients who underwent major eye surgery at Enugu State University of Science and Technology (ESUT) Teaching Hospital Parklane Enugu from October 2005 to September 2006 were reviewed. The patients were routinely screened for the presence of HIV infection after pretest counseling. Information was sought on patients' bio-data, type of surgery and HIV status using a protocol designed for the study.

RESULTS: A total of 133 patients had major eye surgeries during the study period; 67(50.4%) were males while 66(49.6%) were females. The age range was 4 months to 82 years. Cataract extraction (54.9%), removal of eye (21.8%) and repair of penetrating injuries (15.1%) were the commonest operations. Four patients were HIV seropositive giving a prevalence of 3.0%.

CONCLUSION: Patients have been identified to be HIV positive with apparently unrelated eye diseases. Routine HIV voluntary counseling and testing services is advocated for all ophthalmic surgery patients so that seropositive patients can be identified and early appropriate management commenced.

KEYWORDS: HIV; ophthalmic surgery; early diagnosis; developing countries

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INTRODUCTION

HIV/AIDS has become a global pandemic. It is estimated that globally 38.6million people are living with HIV/AIDS and sub-Saharan Africa is the region with the highest burden of AIDS.¹ AIDS is judged to be a leading cause of premature death among people aged 15-59years in this region.²

Eye care services are targeted to both males and females of all age groups. Many patients may not visit a HIV voluntary counseling and testing service centre. In the course of assessing eye care such patients can be reached.

Thus incorporating HIV voluntary counseling and testing services into eye care services can serve as a point where HIV positive patients can be identified and managed appropriately. Increased mortality in the first one month of antiretroviral therapy in resource poor countries has partly been attributed to late diagnosis and treatment of advanced HIV disease.²

The current study aims to review the HIV status of the patients who underwent major eye surgery at a Nigerian teaching hospital.

METHODS

The medical records of patients who underwent major eye surgeries requiring admission at ESUT Teaching Hospital Parklane Enugu from October 2005 to September 2006 were reviewed retrospectively. The patients were routinely screened for the presence of HIV infection by ELISA method after pretest counseling. Those who tested positive were sent for confirmatory test. Information was obtained on patients' bio-data, type of surgery and HIV status using a protocol designed for the study.

RESULT

A total of 133 patients underwent major eye surgeries during the study period; 67(50.4%) were males while 66(49.6%) were females. The age range was 4 months to 82 years. A little over half of the patients (51.8%) were above 50 years.

The distribution of the eye operations is shown in Table 1. Cataract extraction (54.9%) removal of eye (21.8%) and repair of penetrating injuries (15.1%) were the commonest operations. Four patients were HIV positive giving a seroprevalence of 3.0%.

The first HIV seropositive patient was a 5 year old girl who presented with spontaneous perforation of the cornea, generalized lymph adenopathy and recurrent fever. She had a past history of blood transfusion.

The second seropositive patient was a 36 year old male trader who came for evisceration of the right eye following perforated corneal ulcer. He was treated for tuberculosis 10 years prior to presentation.

The third seropositive patient was a 44 year old female farmer, who presented with a lid mass that required excision biopsy. The histopathology report was unavailable as the patient was lost to follow up. The

histopathology laboratory of our hospital was non-functional at that time and she was referred to a sister institution to obtain a histopathology report. The fourth seropositive patient was a 54 year old man, a commercial

driver who presented with spontaneous perforations of the cornea at 2 spots. He was a known HIV positive patient receiving antiretroviral therapy from a sister institution. He did not disclose this initially.

Table 1: Distribution of the surgery types in 133 patients who underwent major surgery

Surgery	Number	Percent
Cataract extraction	73	54.9
Removal of eye	29	21.8
Repair of penetrating injuries	20	15.1
Trabeculectomy	5	3.8
Excision biopsy	3	2.2
Others	3	2.2
Total	133	100.0

DISCUSSION

In a bid to curb the spread of HIV/AIDS people are encouraged to know their HIV status by seeking HIV voluntary counseling and testing services. Setting up of vertical programmes to render this service will be expensive in terms of manpower and infrastructure. Stigmatization may also be associated with such HIV voluntary counseling and testing centres. Incorporating HIV voluntary counseling and testing into ophthalmic surgery services can help to reach more people who would ordinarily not seek HIV voluntary counseling and testing as early diagnosis and treatment are desirable.²

A seroprevalence of 3.0% was noted in this study. This is lower than 9.9% documented at Onitsha, Nigeria.³ The study included all eye patients seen in their centre not only major surgery patients. Cataract extraction which occurs more in the older age group accounted for little over half of the operations in this series. Perhaps voluntary counseling and testing of all ophthalmic surgery patients (not only those going for admission) can help to identify more people living with HIV/AIDS so that they can be managed appropriately.

Nosocomial transmission of HIV infection has been documented.⁴ The current study shows that there is a potential hazard of transmitting HIV/AIDS from one patient to another or from a patient to a health worker. It has been noted that many health workers do not adhere to universal precautions,⁵ but the need for it cannot be overemphasized.

Interestingly, two of the patients presented with spontaneous perforation of the cornea. This is a rare condition which has also been reported in literature^{6,7} in HIV/AIDS patients. Both patients were not just HIV positive but had progressed to AIDS. It is advocated that a

patient with this rare presentation must be screened for HIV status so that appropriate antiretroviral therapy can be instituted.

CONCLUSION

Some patients that underwent major eye surgery were found to be seropositive to HIV. It is advocated that routine HIV voluntary counseling and testing be offered to all ophthalmic surgery patients (major and minor surgeries inclusive). Such HIV positive patients can be identified and managed appropriately, thus facilitating early diagnosis and treatment.

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