Pattern of Ocular Presentation of Human Immunodeficiency Virus (HIV) Positive Patients in National Eye Centre, Kaduna

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Background: Ocular involvement of HIV is common with a prevalence of 50-70%[1]. These presentations may range from asymptomatic anterior segment lesions to more severe sight threatening posterior segment lesions. The severity of the lesions increases as the immune competence decreases. The aim of this study was to determine the pattern of ocular presentation of HIV positive patients in National Eye Centre, Kaduna.

Methods: The medical records of HIV positive patients seen in National Eye Centre, Kaduna between January 2012 through December 2016 were reviewed.

Data obtained include: demographic information, diagnosis, treatment obtained, presenting and post treatment logMAR visual acuity (VA), use of HAART and presence of any systemic disease(s).

Inclusion criteria: Patients who had complete records, dilated fundoscopy and at least two clinic visits.

Results: A total of 69 cases were eligible out of 230 reviewed cases (a hospital prevalence of 0.1%), with age range of 6-75years and mean age 36.9years. Of the participants, 53.6% were males, with a female: male ratio of 1:1.16. The commonest ophthalmic presentation was conjunctival squamous cell carcinoma (n= 17/69: 24.6%), followed closely by cataract (n= 16/69 :23.2%). Others include uveitis (11.6%), corneal ulcer (7.3%), Herpes zoster ophthalmicus (5.8%), Glaucoma (4.4%), Pterygium (2.9%), and diabetic retinopathy (2.9%) (Figure 1). One patient each presented with dacryocystitis, lacrimal gland tumour, molluscum contangiosum, optic neuritis, Steven Johnson syndrome amongst others. The interventions received by the patients include: medical treatment 31.8%, cataract extraction 17.39%, incisional and excisional biopsies 13.04%, pterygium excision 2.9% optical iridectomy 2.9%, corneal repair 1.45%, Nd: Yag Peripheral iridotomy 1.45%, Trabeculectomy +MMC 1.45% while the remaining 4.64% were lost to follow up. Mean entry VA in RE was 1.7 and post treatment VA was 3.7 logMAR units while mean entry VA in LE was 1.6 and post treatment was 2.2 logMAR units, respectively. Only 41% of the cases reviewed were on HAART, 13% were not on HAART while information on HAART use was not obtained from the remaining 46%. Systemic comorbidities include: Hypertension (36%), diabetes mellitus (2%), combined hypertension and Diabetes (1%).

Discussion: The study showed a wide range of ocular presentation of HIV. The more common presentations were in the anterior segment, with squamous cell carcinoma being the most common, similar to reports from previous studies.[1,2,3.] The study had more males with these features, just as obtained by Antereh et al.[1] A higher prevalence of HIV in males have been observed in developing world especially sub-Saharan Africa.[4] Enrolment for HAART is still low, as only 41 % of patients in this study were on HAART.[5]

Conclusion: Conjunctival squamous cell carcinoma is the commonest ocular presentation in HIV positive patients. Therefore, routine ophthalmologic evaluation of HIV positive patients is recommended to reduce visual impairment and/or blindness. Enrolment for and adequate use of HAART and follow up is highly recommended.

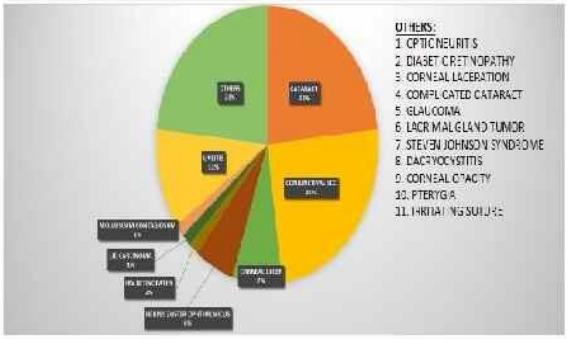

Fig. 1: Ocular presentations of patients with HIV in National Eye Centre, 2012-2016

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