

Ophthalmic Manifestations of HIV Infection-A Clinical Study

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ABSTRACT

Majority of the patients in this study were in the age group of 20 -40. The mode of transmission in most of the cases was Trans sexual. In this study group, the previously diagnosed HIV positive cases were screened within one year of detection. Majority of the patients in this study were asymptomatic. 41.33 patients were symptomatic with defective vision being the most common complaint. Vesicular eruptions with pain were the next common complaint in patients with HZO. A clinical diagnosis of CMV retinitis was made in three patients who presented with bilateral loss of vision. Out of the 74 cases screened, 40 patients had ocular involvement (53.3%) The most common manifestation was non-infectious HIV retinopathy seen in 14 patients (18.67%).

Key words: HIV, CMV retinitis, Vesicular eruption

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with ophthalmic complaints were included in the study. Routine clinical examination and baseline investigations including urine analysis and blood biochemical parameters were carried out. All the patients were subjected to thorough ophthalmic investigations.

INTRODUCTION

HIV is characterized by a gradual decrease in circulating CD4+T lymphocytes and subsequent development of venous opportunistic infections and neoplasia. The role of the ophthalmologist in the diagnosis of AIDS is becoming very significant [1-4]. Not only does the eye reflect systemic disease, but ocular involvement may often precede systemic manifestations. This study aims to evaluate the venous ophthalmic manifestations in proven HIV seropositive patients and to emphasize role of ophthalmologist in the diagnosis of HIV infection.

METHODOLOGY

A group of 46 patients presented to our OPD primarily

RESULTS

Cases which initially presented to ophthalmology OPD and were later found to be HIV positive had a higher incidence of Ocular complications. In this study, out of the 75 patients, 40 patients had ocular manifestations. Most common was non-infectious HIV retinopathy seen in 13 patients presenting as Cotton wool spots, retinal haemorrhages and micro aneurysms. Next common manifestation was Herpes Zoster Ophthalmicus seen in 5 patients. Non healing corneal ulcer was seen in 3 patients. A clinical diagnosis of CMV retinitis was made in three patients (Tables 1 and Table 2).

Table 1: Clinical manifestations.

Systemic Manifestations	No. of Patients (%)	No. of Patients with Ocular findings (%)
GUT (Genital ulcer, warts etc.)	9	3
GIT	7	5
CVS	-	-
RS (Pulmonary TB, Pneumocystosis etc.)	21	10
CNS (Cryptococcal Meningitis)	1	2
SKIN (HS/HZ/MC/DLE) Icthyosis/scabies	10	7
ENT (Oral candidiasis, Leukoplakia etc.)	14	5
Others (ALL, FGL, Typhoid etc.)	5	1

Table 2: Ophthalmic manifestations.

Orbit & Adnexa	9	12.00%
Molluscum Contagiosum	1	1.33%
Conjunctival microvasculopathy	2	2.66%
Herpes Zoster ophthalmicus	5	6.66%
Orbital cellulitis	1	1.33%
Anterior segment	11	14.67%
Herpes Zoster Ophthalmicus	5	6.66%
Chronic Low grade Keratouveitis	3	4.00%
Non Healing Corneal ulcer	3	4.00%
Posterior Segment	19	25.33%
HIV Retinopathy	14	18.66%
CMV retinitis	3	4.00%
Neuro ophthalmology	3	4.00%
RB neuritis	2	2.66%
Optic atrophy	1	1.33%

DISCUSSION AND CONCLUSION

From the screened cases 41.33 patients were symptomatic with defective vision being the most common complaint. Vesicular eruptions with pain were the next common complaint in patients with HZO. A clinical diagnosis of CMV retinitis was made in three patients who presented with bilateral loss of vision. Irritation was the main complaint in patients with conjunctiva microvasculopathy and pain was the main complaint in patients with orbital cellulitis. Herpes Zoster Ophthalmicus was seen in 5 patients. Conjunctival microvasculopathy and Retrobulbar neuritis were diagnosed in 2.66% of the patients. The role of ophthalmologists as a diagnostic clinician in HIV infection should be stressed since in this study more than 50% of the case in which we suspected HIV has proven positive on testing and follow up. These results are in concurrence with the previous studies [4-9].

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