





# A HIV infected patient first diagnosed in opnthalmology

Zhang yanyan, Prof.Zhang hong

Eye hospital of First Affiliated Hospital of Harbin Medical University

# **Objective**

To report a case of HIV infection in ophthalmology, and to ensure the correct diagnosis and vigilance of HIV with atypical ocular diseases.

#### **METHODS**

A patients with HIV whose vision of left eye has decreased for two months was admitted to our hospital. After admission, disease history, eye examinations and laboratory related examinations were taken. Antiviral and symptomatic treatment were started. The results of the examination and changes of the condition were recorded.

## **DISCUSSION**

AIDS is caused by HIV infection. The pathological changes were mainly due to the infection of CD4T lymphocyte. In China, the number of HIV/AIDS patients is increasing, with ocular manifestations as the first diagnosis of the patient is not uncommon. HIV virus exists in the human body, aqueous humor, vitreum, and also cornea, retina and optic nerve or other tissues. It have been reported there was still high HIV viral load in HIV patients, blood and tears after treatment, suggesting that the lacrimal gland, tear may contain HIV virus. It also reminded that medical workers should be careful on treatment of HIV positive patients in the clinical eye examination or surgery. This case is a HIV infection with uveitis as the primary manifestation. This suggests that we should pay attention to the possibility of HIV infection in young people with severe atypical uveitis.

### CONCLUSION

The patient denied drug use, blood transfusion and marital history. Combined the test results and the history, the patient was sent to the Provincial Center for Disease Control for examination again, and also was diagnosed as HIV carriers. After treatment, his symptoms has improved.

#### **RESULTS**

Ophthalmic examination: VD:1.0, VS:HM, TR=12mmHg, TL=25mmHq. There were little hemorrhage and extravasation in right retina. tiny haemangioma, blood tortuous and dilatation was also observed. The left eye showed conjunctival hyperemia and corneal opacity, a large number of KPs attached to the cornea, which gradually enlarged and then fused into a clump at the center. The anterior chamber depth was normal, Aqueous humor was turbid with irregular pupil, d=4.5mm, light reflex(-), partial iris synechia. Pale blue opacity was observed in the center of lens, point-like opacity at the margin. Ocular fundus can not be seen. Anterior ocular segment (picture photograph 1) and ultrasonography (picture 2) at admission were as below. FFA (picture 3) shows: optic disk fluorescence leakage, retinal vascular dilated, and retinal micro hemangioma strong fluorescence. Hemorrhage fluorescence, and retinal circulation time was slightly longer. Macular dark area was not clear. Laboratory examination: white blood cell 3.28×109 /L, neutrophil 76.24%, lymphocyte 17.14%, monocyte 6.14%, eosinophils 0.3%, red blood cell 3.59×1012/L, hemoglobin 114g/L, platelet 142g/L. Laboratory immune response test: syphilis, hepatitis B virus and hepatitis C virus examination results were negative, anti human immunodeficiency virus (HIV) positive. electrocardiogram indicated that once AVB, coagulation result is normal. The patient was very depressed and had an unexplained syncope once after admission. The condition improved after treatment (picture 4: After treatment for 2 days). He was discharged from the hospital after receiving treatment for 10d (picture

of left eye at discharges: HM, corneal KP(-), crystal turbid state unchanged. Fundus exudates, blood diminuted, partial peripheral vascular dilation, scattered micro hemangioma and hemorrhage area was observed.

## **FIGURE**





Picture 1. Anterior ocular segment photograph: A large number of serum like KP attached to the cornea, which gradually enlarged and then fused into a club at the center, became smaller nearly surrounding. The anterior chamber depth was normal. Aqueous humor was turbid, not round pupil, d=4.5mm, light reflex(-), partial iris synechia. Y pale blue opacity was observed in the center of lens, point-like opacity at the margin. Ocular fundus can not be seen.





Picture 2. Ocular ultrasonography : Vitreous opacities in both eyes and vitreous hemorrhage in the right eye.



Picture 3. FFA: Optic disk fluorescence leaked, retinal vascular dilated, and retinal micro hemangioma shew strong

fluorescence.Hemorrhage blocked fluorescence, and retinal circulation time was slightly longer.





Picture 4. Anterior ocular segment photograph: After treatment for 2 days.





Picture 5. Treatment for 10d: corneal KP(-), crystal turbid state unchanged. Fundus exudated, blood diminuted, Partial peripheral vascular dilation, scattered micro hemangioma and hemorrhage area was observed.