



A Review of Ocular Toxoplasmosis and a Report of Several Cases Including Neurortinitis in a 36-Year-Old Man with Toxoplasmosis and Two Cases of Toxoplasmosis Relapse

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Published Date: August 05, 2024**Summary:**

Toxoplasma gondii is an infectious protozoan parasite that infects about 1/3 of the world's population. In the acute stage of the disease, tachyzoites multiply and then come in the form of a cyst, which creates a chronic infectious state. There was a report of a case with reduced vision in the right eye to the ophthalmology clinic due to visual impairment, which was diagnosed in the eye examination as neuroretinitis with retinochoroiditis with the characteristic features of toxoplasmosis. Also, two cases of recurrence of toxoplasmosis are mentioned. In addition to the importance of this disease that it can be blinding, if it is not treated on time, it will indicate the clinical and laboratory diagnosis and its prevention and treatment methods to emphasize the importance of this disease.

Introduction

Toxoplasmosis can be congenital or acquired. The causes of neuroretinitis include infectious, non-infectious and idiopathic factors. Visual disturbances are usually secondary to lesion involvement in the macula or the optic nerve or severe vitreous inflammation with peripheral vitreous involvement of the retina. Toxoplasmosis is a widespread parasitic disease in the world. Human infection is transmitted through food and water contaminated with the feces of a cat carrying toxoplasmosis cysts, undercooked or raw meat, or through mother to fetus, and other causes of transmission include transmission. Blood, organ and cell transplantation, and rarely transferred to humans through the laboratory.

It has been proven that the parasite has a double relationship in the eye, so that by stimulating the immune system, it causes various initial lesions and frequent recurrences, which severely leads to blindness [1,2].

According to the clinical manifestations and some of the laboratory findings, the treatment and prevention of toxoplasmosis has made remarkable progress, but there are still controversial cases, which in this article will review the clinical manifestations, while the report of several cases of toxoplasmosis chorioretinitis will be mentioned.

Review and Case Reports

A 36-year-old patient with blurred vision visited the eye clinic, who mentioned it about a week ago, and considering that the pain and blurred vision were not severe, he did not pay attention to it. In the examination of the right eye, the visual acuity was 10/7 and the left eye was 10/10 uncorrected, so no refractive error was seen in the Refraction performed. In the biomicroscopic examination of the extraocular appendages, in addition to the anterior chamber, no pathological point was observed, and in the funduscopy, it was found that the right eye had macular inflammation in the form of neuroretinitis, which is evident in picture number 1, with inflammation of the vitreous to the extent of 1,2+, along with retinochoroiditis in the supratemporal area with an unclear border view. And the fluffy characteristic of toxoplasmosis retinochoroiditis which can be seen in picture one. Although usually in the examination of the fundus of such patient, an old scar is seen in the retina during the recurrence of the disease, so that in an 18-year-old young man, can see both an inactive and an active lesion in picture number 2, but in this case, the old lesion was not seen in any of the eyes.

It was not possible, while its manifestation in the form of neuroretinitis is less reported, despite the characteristic without lesions, toxoplasmosis titer was requested in terms of IGM and IGG, both of which were reported to have high levels. The patient was treated with co trimoxazole and responded to the treatment, although the two other cases were middle-aged men who presented with a recurrence of chorioretinitis, and in the third case, a 35-year-old man, in addition to the active and inactive lesion, vitreous inflammation was to the extent that reduced the clarity of image number 3. The aim of this review is to emphasize the problem of three cases of active age patients and to recommend timely prevention and treatment, as well as the association of one case of chorioretinitis with neuroretinitis, which is less reported, in a patient who had no previous history, either subjective or objective. or to warn the occurrence of recurrence in patients.

Discussion

In this report, the association of neuroretinitis with retinal retinochoroiditis in a patient with toxoplasmosis without previous

history or old scars in both eyes of the patient is mentioned. In other studies, including case reports or research studies in toxoplasmosis, the coincidence of retinochoroiditis with neuroretinitis has been stated in a small number, especially in this case, no signs indicating old retinochoroiditis were seen in any of the eyes. Joseph's study reported such a claim that the association Neuroretinitis with toxoplasmosis was reported similar to our study, although it is rare, but it should be investigated for toxoplasmosis [2].

Another study by OV and his colleagues reported the role of the reduction of inflammatory cells of regulatory cells in patients who had eye involvement associated with clinical symptoms in the retina compared to people who only had a positive serological test without clinical sign or predisposing factor [3].

Our cases describe the characteristic typical fluffy pattern of retinochoroiditis in 3 cases that two of them showed previous scar lesion. Hence according to tendency of recurrence of this disease inflammation causes by disease not only the clear ocular media become cloudy but also complication such as retinochoroidal drangment or optic nerve involvements can causes sever visual loss. It is not possible to do definitely treat the diseases because it is not available a drug to have cysticidal effect can eliminate all non-active cystic lesion therefore prevention is our main plan till now.

Acknowledgement

None.

Conflict of Interest

Author declares no conflict of interest.

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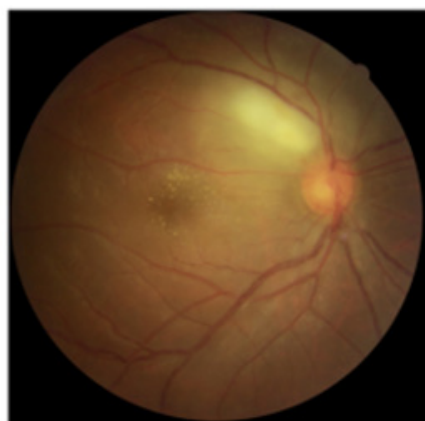


Figure 1 Characteristic retinochoroiditis accompany neuroretinitis

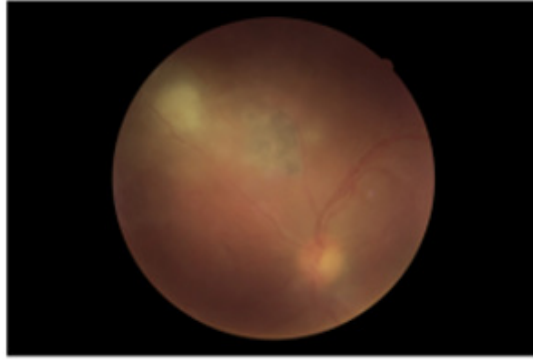


Figure 2 Characteristic retinochoroiditis accompany old scar

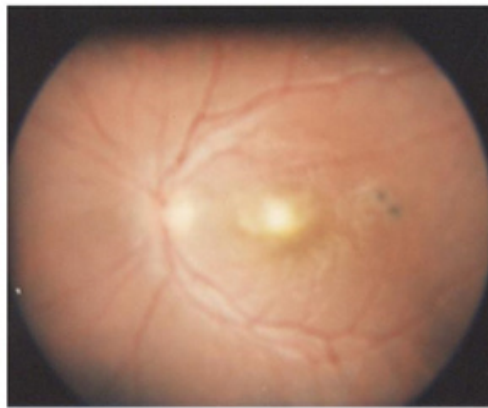


Figure 3 Characteristic retinochoroiditis accompany old scar