# Serous Macular Detachment Related to Extramacular Toxoplasma Chorioretinitis

## Ekstramaküler Toksoplazma Koryoretinitine Bağlı Seröz Maküla Dekolmanı*

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*Case Report* *Olgu Sunumu*

**ABSTRACT**

It is aimed to present an unusual extramacular ocular toxoplasmosis which was complicated with serous macular detachment. A 27-year-old man admitted to our clinic with the complaint of abrupt visual acuity loss. The patient was only counting fingers at the presentation. Intraocular pressure was 14 mmHg at the affected eye. He had a mild ciliary conjuntival injection with clear cornea and crystalline lens. Initial fundus examination disclosed mild vitritis, and serous macular detachment. Detailed examination demonstrated an active peripheral chorioretinal lesion reminding ocular toxoplasmosis. Serology confirmed active toxoplasmosis. Serous macular detachment regressed within two weeks while chorioretinitis resolved within four weeks upon use of the appropriate antibiotic and steroid treatment. Two months later, visual acuity improved to 20/20. A hyperpigmented scar developed paracentrally. In patients with posterior uveitis and serous macular detachment, the diagnosis of ocular toxoplasmosis should be kept in mind, and serologic tests should be considered. Excellent anatomic and visual outcomes can be achieved with prompt and suitable therapy.

**Key Words:** Toxoplasma, serous macular detachment.

**ÖZ**

Seröz maküla dekolmanı ile komplike olmuş ekstramakuler bir toksoplazma koyoretiniti olgusunu sunmak amaçlandı. Yirmiyedi yaşında erkek hasta kliniğimize ani görme azalması şikayeti ile başvurdu. Hasta başvuduğunda görme düzeyi el hareketleri seviyesindeydi. Göz içi basıncı 14 mmHg ölçüldü. Biyomikroskobisinde hafif siliyer konjonktival enjeksiyon, saydam kornea ve lens mevcuttu. Başlangıç fundus muayenesinde hafif vitritis ve seröz maküla dekolmanı izlendi. Detaylı muayenesinde oküler toksoplazmayı andıran aktif bir periferal koryoretinal lezyon tespit edildi. Seroloji ile toksoplazma varlığı kanıtlandı. Uygun antibiyotik ve steroid tedavisiyle seröz maküla dekolmanı iki hafta içerisinde gerilerken koryoetinit dört haftada düzeldi. İki ay sonunda görme keskinliği 20/20 düzeyine yükseldi. Parasantral bölgede hiperpigmente skar dokusu gelişti. Arka üveit ve seröz maküla dekolmanı tablosu ile gelen hastalarda oküler toksoplazma tanısı akılda tutulmalı ve serolojik testler yapılmalıdır. Hızlı ve uygun bir tedavi ile mükemmel anatomik ve fonksiyonel başarı elde edilebilir.

**Anahtar Kelimeler:** Toksoplazma, seröz maküla dekolmanı.

***Ret-Vit 2011;19:Özel Sayı:71-72***

## INTRODUCTION

Ocular toxoplasmosis is caused by an intracellular neurotrophic protozoan toxoplasma gondii which attacks retina and other central nervous system tissues. It is believed to be most common infectious disease to involve retina.[1] Various complications related to ocular toxoplasmosis has been reported i.e. retinal detachment,[2] vascular occlusions,[3] and retinal neovascularisation.[4] Serous macular detachment has not been reported previously.

***Geliş Tarihi : 16/06/2011***
***Kabul Tarihi : 26/08/2011***

***Received : June 16, 2011***
***Accepted : August 26, 2011***

* Bu çalışma SEEOS/BSOS 2011 Kongresi'nde poster olarak sunulmuştur.

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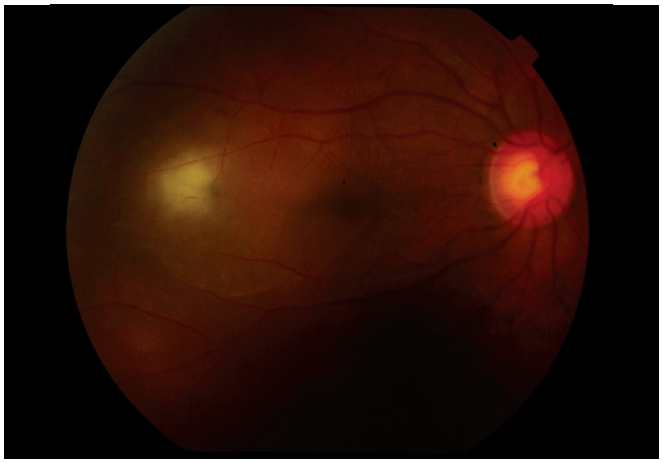

**Figure 1:** Detailed examination demonstrated an active peripheral chorioretinal lesion reminding ocular toxoplasmosis.

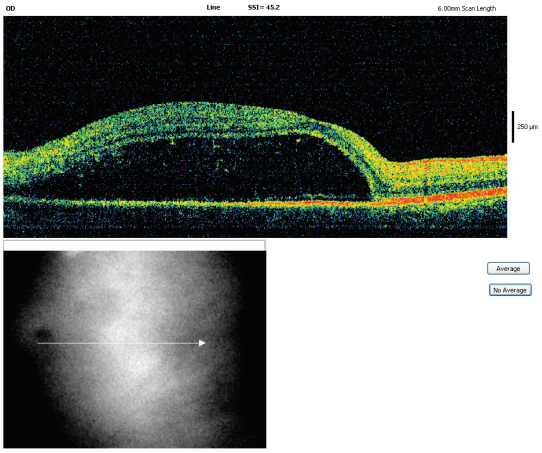


**Figure 2:** Optical coherence tomography showed a serous macular retinal elevation over a non-reflective cavity with minimal shadowing of underlying tissues.

## CASE REPORT

Twenty seven years old patient had sudden visual loss of the right eye. Visual acuity was counting fingers from 2 m and intraocular pressure was 14 mmHg at the affected eye. He had a mild ciliary conjuntival injection, and clear cornea and crystalline lens. Initial fundus examination disclosed mild vitritis, and serous macular detachment. Detailed examination demonstrated an active peripheral chorioretinal lesion reminding ocular toxoplasmosis (Figure 1). Serology was negative for both IgM and IgG initially. IgM was found positive within two weeks. Optical coherence tomography showed a serous macular retinal elevation over a non-reflective cavity with minimal shadowing of underlying tissues (Figure 2).

Anti-toxoplasma antibiotic regimen (clindamycin 300 mg q.i.d. and co-trimoxazole 960 mg b.d.) four weeks and periocular steroid (methyl prednisolone) 40 mg/ml injection was performed.

Visual acuity improved to 5/10 at first week and to 9/10 at second week. Serous detachment resolved completely at first month (Figure 3). Two months later, visual acuity improved to 10/10, vitreous infiltration and active retinitis lesion resolved, and hyperpigmented scar developed.

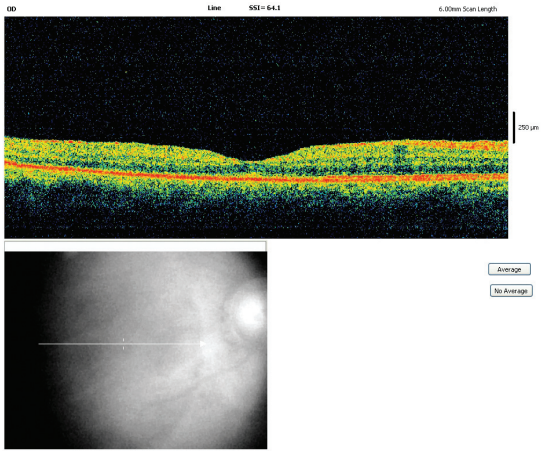


**Figure 3:** Serous detachment resolved completely at first month.

## CONCLUSIONS

The prognosis in toxoplasma retinitis depends on the virulence of organism, competence of host's immune system and size of the lesion. Nearly 25% of eyes develop serious visual loss as a result of macular involvement, primary or secondary optic nerve head involvement, occlusion of major blood vessel by the inflammatory focus.[5]

Vision loss depended on serous macular detachment related to parafoveal chorioretinitis, rather than direct macular involvement, in our case. Thus, recovery of vision was perfect because of no macular or optic nerve damage was present.

In ocular toxoplasmosis, various complications such as retinal detachment,[2] vascular occlusions,[3] and retinal neovascularisation,[4] were reported previously. To the best of our knowledge, serous macular detachment has not been reported in the literature.

In eyes with both posterior uveitis and serous macular detachment, ocular toxoplasmosis should be considered, and detailed retinal examination and serologic tests should be performed.

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