

A case of bilateral posterior scleritis with serous detachment

Bilateral seröz dekolmanlı arka sklerit olgusu

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ABSTRACT

Seventeen years old male patient was admitted to the clinic with complaints of pain in the right eye, reduction of vision, painful eye movements and headache for 10 days. Visual acuity was found Snellen 0.2 on the right eye and 1.0 on the left eye. Anterior segment examination was normal. Fundus examination revealed bilateral chorioretinal fold on the papillo-macular bundle and serous macular detachment on the right eye. Fundus angiography (FA) revealed late macular hyperfluorescence due to leakage. Exudative retinal detachment on the right macula was observed in optical coherence tomography (OCT). Orbital ultrasonography and computed tomography were revealed thickening of the right posterior scleral wall. Investigations did not reveal any other cause of headache or systemic associated autoimmune disease. Oral steroid treatment (metil prednisolon 64 mg/day) was started. It was seen that the left eye also affected at the second week of treatment. OCT revealed bilateral exudative retinal detachment. Treatment was going on. Complaint of decreased visual acuity was recovered one month later, and bilateral exudative retinal detachment resolved. In this article, we aimed to present a case of bilateral idiopathic posterior scleritis and associated exudative retinal detachment and with good response to therapy.

Key words: Posterior scleritis, serous retinal detachment, steroid therapy

INTRODUCTION

The basic pathology of scleritis is vasculitis. In this disease, Type 3 allergic reaction was observed by accumulation characterized immunocomplex in blood vessels. Persistent immunological injury may lead to chronic granulomatous damage. Pain, loss of vision and systemic immunological diseases are the most prominent feature of the disease. More than

ÖZET

On yedi yaşında erkek hasta 10 gündür sağ gözünde ağrı, görme azlığı, göz hareketlerinin ağrılı olması ve baş ağrısı şikâyeti ile polikliniğimize başvurdu. Görme keskinliği sağ gözde 0,2; sol gözde tam olarak bulundu. Ön segment muayenesinde patoloji saptanmadı. Fundus muayenesinde papillo-maküler demet üzerinde bilateral koryoretinal kırışıklıklar mevcuttu. Çekilen fluoresceinli fundus anjiyografisinde sol fundusta maküla altında geç dönemde sızıntıya bağlı hiperflöresans izlendi. Optik koherens tomografide (OCT) sağ makülada eksüdatif retina dekolmanı izlendi. Orbital ultrasonografi ve bilgisayarlı tomografi incelemesinde sklera arka duvarında kalınlaşma izlendi. Sistemik araştırmalarda başka bir baş ağrısı etkeni yada ilişkili olabilecek romatolojik bir problem tespit edilemedi. Hastaya prednol 64 mg/gün oral yolla başlandı. İki hafta sonraki kontrolünde sol gözünde de görme azlığı şikâyeti başlamıştı ve muayenede bilateral fundusta kırışıklıklar izlendi. OCT' de bilateral eksüdatif retina dekolmanı saptandı. Tedaviye devam edildi ve bir ay sonraki kontrolünde görme azlığı şikâyetinin geçtiği ve bilateral eksüdatif retina dekolmanının düzeldiği saptandı. Bu makalede bilateral idiopatik posterior sklerit ve buna bağlı bilateral eksüdatif retina dekolmanı tanısı koyduğumuz ve tedaviye yanıtı iyi olan bir olguyu sunmayı amaçladık.

Anahtar kelimeler: Arka sklerit, seröz retina dekolmanı, steroid tedavisi

half are bilateral. The most common systemic cause is collagen tissue diseases especially rheumatoid arthritis. The beginning of disease is usually gradual. The majority of patients complain with pain.¹ Headache may be accompanied. Eyes are sensitive to touch.² Scleritis is divided into anterior (88-98%) and posterior (2-12%) two groups anatomically. About 30% of patients with posterior scleritis have systemic autoimmune disease.³ The most common

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complaints with posterior scleritis are pain, sensitivity, proptosis, visual loss, and sometimes limitation of eye movement.^{1,2} Choroidal folds, exudative retinal detachment, papilledema, choroidal thickening, posterior uveitis, and secondary angle closure glaucoma may develop in 85% of cases.¹⁻³ In some patients, intra-retinal deposits of reminiscent exudates can be seen.³ Scleral thinning can be seen in patients with long-lasting. Pain can spread other parts of the head. Scleral thickening can be seen in B-mode ultrasound, CT scan or MRI.¹ Systemic or retrobulbar steroids or NSAIDs are used in the treatment protocol. In severe cases, it may be necessary to use cyclophosphamide, chlorambucil or cyclosporine.⁴

As posterior scleritis is not so much visible in ophthalmology practice, we are aimed to draw attention to early diagnosis and treatment.

CASE

Seventeen years-old male patient was admitted to the clinic with the right eye pain, vision loss, painful eye movements, and with a headache since 10 days. The best corrected visual acuity (BCVA) was Snellen 0.2 on the right eye and 1.0 on the left eye. The anterior segment examination was normal. Fundus examination revealed chorioretinal folds on the bilateral papillo-macular bundle (Figure 1, 2).



Figure 1, 2. Chorioretinal folds on the bilateral papillo macular bundle.

Fundus fluorescein angiography revealed hyperfluorescence at the bottom of the left macular area on late phase due to leakage (Figure 3). Exudative retinal detachment in the right macula was observed in OCT (Figure 4). Intraocular pressure was measured as 15 mm Hg bilaterally. B-mode ultrasonography and computed tomography were determined thickening of the right posterior scleral wall (Figure 5). Laboratory investigations and multidisciplinary evaluation (Rheumatology, Neurology, and Otorhinolaryngology) were revealed any headache reason and rheumatological association. Posterior scleritis diagnosis was made and 64 mg/day metil prednisolon (Prednol) started orally. Two weeks later, complain of decreased vision in his left eye added and bilateral chorioretinal folds were observed in fundus examination OCT also revealed adding exudative retinal detachment on the left (Figure 6). Treatment was continued and one month later decreased visual acuity and bilateral exudative retinal detachment were improved. Bilateral hyper-pigmentation on the macula (Figure 7) and intraretinal white deposits on

peripheral retina were developed. Daily dose of steroid was tapered off. Recurrence came up once during the 14-month follow-up period. Monthly monitoring of patient continues in the outpatient clinic and no recurrence was seen in last eight months.

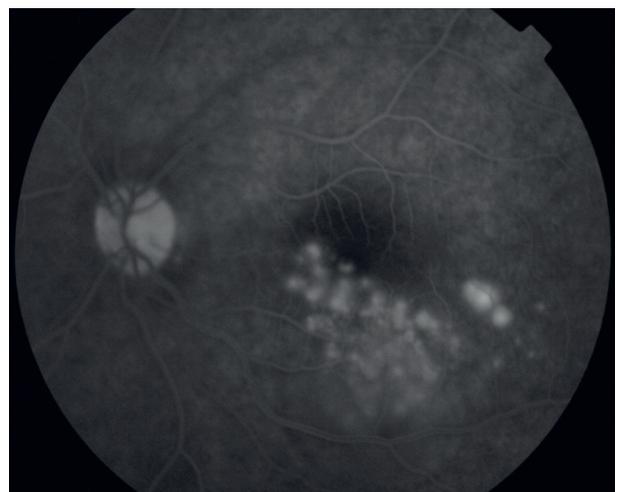


Figure 3. Hyperfluorescence at the bottom of the left macular area on late phase due to leakage on the FA.

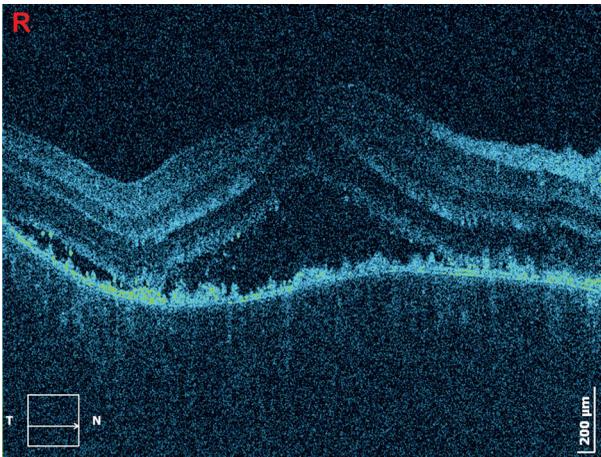


Figure 4. Exudative retinal detachment in the right macula in OCT.

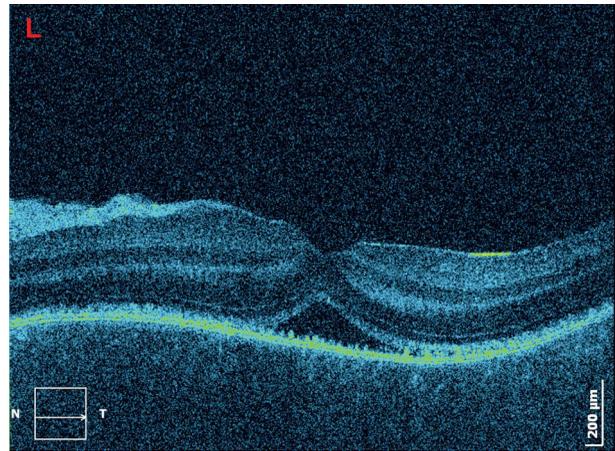


Figure 7. Bilateral hyper-pigmentation on the macula.

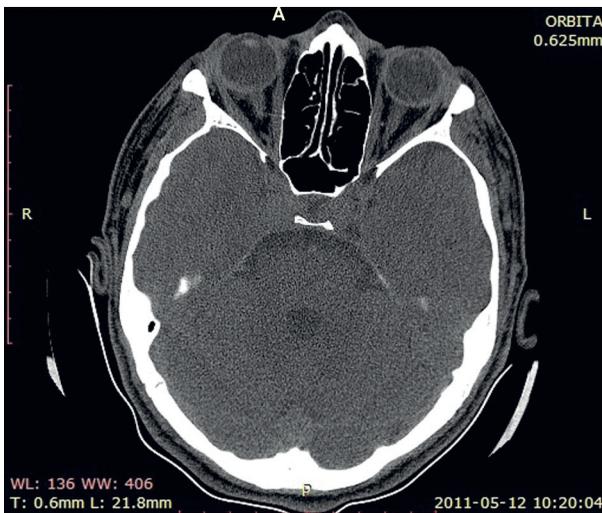


Figure 5. Thickening of the right posterior scleral wall on the computed tomography.



Figure 6. Exudative retinal detachment in the left macula in OCT.

DISCUSSION

Posterior Scleritis forms at least part of the scleritis (%2-12). Prevalence is thought to be approximately 6/100.000.¹ Because a variety of inflammatory, non-inflammatory diseases of the eye may simulate to posterior scleritis (uveitis posterior, Vogt-Koyanagi-Harada syndrome, central serous retinopathy) it may be misdiagnosed by ophthalmologists.⁵ About 30% of cases with posterior scleritis have systemic autoimmune disease association.⁶ Association with systemic diseases is more common in older age. The patient, 17 years old and positive findings were not found in studies of systemic disease. In the majority of patients are of severe eye pain, headaches, proptosis and decreased vision.¹⁻³ B-mode ultrasonography or orbital tomography can reveal scleral thickening due to the posterior scleritis.⁵ Optic disc edema and macular edema may occur in some cases.³ Scleral thickening and hypo reflective appearance around the optic disc, depending on retro bulbar edema, are formed together T marks in ultrasonography.⁴ The case also has T marks more pronounced on the right. Then chorioretinal folds and exudative retinal detachment develops and this adversely affects the central visual acuity.^{1,2} The patient has a 10-day history of decreased visual acuity which had developed after headache. There were exudative retinal detachment, chorioretinal wrinkling and scleral thickening in the orbital CT on the initial examination. All these features returned to normal after treatment. There was a good response to steroids in the literature.^{1,2,5} Bilateral macular hyperpigmentation developed after treatment in the case. To the

best our knowledge, this finding had not reported previously in the literature.

As a result, posterior scleritis is rarely developing in posterior segment disease. Exudative retinal detachment may develop during the course of the disease should be considered and treatment should be started early. If misdiagnosed and no treatment, the disease can cause irreversible sequels in the fundus.

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