Presumed Central Serous Retinopathy Due to Sertraline (Sertraline Retinopathy)

Muhtemel Sertraline Bağlı Santral Seroz Retinopati

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ABSTRACT

A 36 year-old male patient who developed central serous retinopathy (CSR) presumed to result from intake of sertraline hydrochloride (100 mg per day) during one year.

A complete ocular examination, color vision testing, automated static perimetry, optical coherence tomography (OCT) and fundus fluorescein angiography (FFA) were performed. OCT and FFA findings were revealed a central serous retinopathy in the right eye in a patient who use sertraline for more than a year. In conclussion, the patients who use sertralin should be aware of the potential risk of developing CSR or the other macular changes.

Key words: Sertraline, central serous retinopathy (CSR), optical coherence tomography (OCT).

INTRODUCTION

Sertraline hydrochloride is a selective serotonin reuptake inhibitor (SSRI) in the central nervous system with the chemical name of (1S-cis)-4-(3, 4-Dichlorophenyl)- 1, 2, 3, 4-tetrahydro-N-methyl-1-naphthalamine, C17H17Cl2N (1). One of the differences of sertraline from other SSRIs is its relative potency for dopamine reuptake inhibition. Sertraline's effect on blocking dopamine is considerably weaker than its ability to block serotonin uptake.[2]

This medicine is reported to be used for depression, obsessive compulsive disorder and panic disorder.[1]

In the use of its early stage, sertraline which is evaluated into SSRI group, causes sudden changes in motor activities like agitation, acatasia, psychomotor redardation, parkinsonism, distoric activities; in the use of its later stages it causes sexual disorder and some side effects on gastrointestinal system. Some ophthalmological side effects have been mentioned in the literature such as eye pain, abnormal accomodation, xerofthalmi, photophobia, diplopia, epiphora, scotom and visual loss.[3]

There were only two published study associated with maculopathy due to sertraline usage and according to the National Registry of Drug-Induced Ocular Side Effects, this is only the

sixth reported case of presumed sertraline maculopathy.In additon there is no publication reporting the CSR formation due to sertraline usage in the litrature.[4,5]

This case indicates the central serous machulopathy developed in the right eye of a male patient using sertraline for more than a year.

CASE

A 36 year-old male patient was brought to the psychiatry policlinic by his relatives after his suicidal attempt almost a year ago. After the psychiatric examination, some somatic complaints like not being able to get no pleasure from life, compete with the problems about his family, insomnia, dysorexia. His complaints have started before 3 months he applied, and become stronger increasingly. After patient's psychological state examination, his self-care has diminished, he walks slowly, and it has been observed that the patient's activities have declined and slowed down. During the examination, the patient said that he felt hopeless and sad. It was observed that the patient had a lower level of idea production, he talks was like he was forcing himself and in a low voice tone. After the psychiatric evaluation (DSM IV-TR) and psychometric tests (Hamilton depression rating scale: 27, Hamilton anxiety rating scale: 35), the patient was diagnosed as major depression. Oral sertraline was started to the patient 50mg per day, later it was increased to 100 mg per day end of the second month.

After the patient used the medicine for 12 months, he has applied to the eye clinic for visual loss of and eye pain in the right eye. On ophthalmic examination, best corrected visual aquity was 20/60 OS and 20/20 OD. Anterior segment examination and intraocular pressure were unremarkable in both eyes. Pupils were isocoric with brisk light reaction and no afferent pupillary defect. Her color vision was normal using Ishihara test.

Funduscopic examination, of the right fundus includes the foveal macular RPE irregularity and atrophy in ½ disc diameter, left eye was normal. The Florocein Fundus Angiography (FFA), showed hyperfluorescence which started in the early phase superior to the fovea and increased at the late phase (leaks and puddles), left eye showed no leaks (Figure 1). The Optical Coherence Tomography (OCT) of the patient showed macular detechment due to CSR (Figure 2).

Figure 1: *FFA showed hyperfluorescence which started in the early phase superior to the fovea and increased at the late phase (leaks and puddles) in the right eye.*

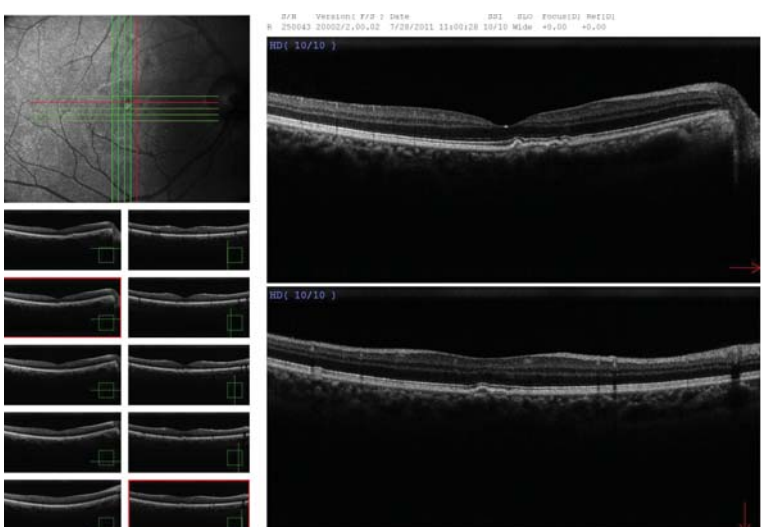

Figure 2: *OCT demonstrated central serous maculopathy (CSR) due to neurosensory detachment of the macula in the right eye.*

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The visual field examination (Humphrey Field Analyzer, central 30.2 Threshold tests) were normal. The patient had no family history of a serious eye problem. The drug was discontinued and the patient followed up for 6 months. At the end of the six month the patient's right vision was 20/25, the left was 20/20. The FFA showed decrease in hyperflourosancency located in the right eye and at OCT CSR was decreased in right (Figure 3).

DISCUSSION

Ocular signs and symptoms of sertraline include periorbital edema, ptosis, diplopia, exophthalmus, nystagmus, photophobia, epiphora, hyphema, conjunctivitis, accommodation problems, xerophthalmia and visual field defects.[3] In addition, Barret et al. have reported anisocoria following sertraline use and Bourgeous et al. also have demonstrated visual hallucinations developed within 3 weeks after the start of sertraline treatment in a patient who receive sertraline 50mg/daily.[6,7]

Lehman et al. have described a case blurred vision, central scotoma, decreased color vision due to using 100 mg sertraline daily for 4 years.[8]

Figure 3: *OCT showed CSR which decreased on the right eye after 6 months.*

Recently, Van Cann et al. have presented a case, reporting retrobulbar hematoma with impaired vision in a patient using sertraline immediately after surgery for an orbital blow-out fracture.[9]

Finally, Sener et al. have reported a case of a woman who developed simultaneous bilateral maculopathy presumed to result from intake of sertraline, as in our case.[4] Meanwhile, recently Mason and Patel have also reported a case of bilateral Bull's eye maculopathy caused by sertraline.[5]

In conclussion, this case highlights the need for patients and clinicians to be aware of the potential of sertraline to cause vision loss due to CSR.

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