

Anisocoria Associated With Sertraline Use: A Case Report

Dr. Mine Ozkan, Dr. Aysu Kıvrak

University of Istanbul, Istanbul Faculty of Medicine, Department of Psychiatry, Çapa/İstanbul/Turkey

Tel: +905327033518

Faks: +902122740444

E-mail: mineozkan_klp@yahoo.com

ABSTRACT

A case of anisocoria associated with an SSRI (selective serotonin reuptake inhibitor) use -sertraline- is reported. A 24 years old female patient who was diagnosed as having a major depression was treated with sertraline. She developed anisocoria after one month of treatment. All physical and laboratory examinations were normal. Although rare, sertraline usage should be taken into consideration in cases of anisocoria.

Keywords: anisocoria, side effects of selective serotonin reuptake inhibitors, sertraline, adverse effects

ÖZET

Sertralin Kullanımına Bağlı Anizokori: Bir Vak'a Takdimi.

SSRI (seçici serotonin geri alım inhibitörü) olan sertralin kullanımına bağlı gelişen bir anizokori vak'ası bildirilmektedir. Majör depresyon tanısı koyulan 24 yaşında kadın hasta sertralin tedavisine alındı. Tedavi başlanmasından 1 ay sonra hastada anizokori gelişti. Tüm fiziksel muayene ve laboratuvar tetkikleri normal olarak değerlendirildi. Sertralin kullanan vak'alarda nadir de olsa anizokori gelişebileceği dikkate alınmalıdır.

Anahtar Kelimeler: anizokori, seçici serotonin geri alım inhibitörlerinin yan etkileri, sertralin, yan etkiler

INTRODUCTION

Anisocoria is the term used to describe the condition where the diameters of the two pupils are different. Clinically detectable anisocoria (>0.4 mm) referred to as simple or physiological anisocoria occurs in the normal population at a rate of 20 percent, with most cases being <1 mm. It may be the result of serious conditions, ranging from uncal herniation to lesions of the brainstem or one or more of the cranial nerves, requiring immediate -urgent- clinical intervention (Gray 2003).

For the physician, the appearance of anisocoria is, therefore, grounds for immediate attention.

Among the rare ophthalmologic side effects of sertraline that have been reported are eye pain, abnormal accommodation, xerophthalmia, photophobia, diplopia, abnormal lacrimation, scotoma, and visual field defects (http://www.rxlist.com/cgi/generic/parox_ad.htm). Şener and Kıratlı (2001) reported a case of maculopathy linked to the use of sertraline. Dorell et al. (2005) also reported a case of diplopia associated with the use of citalopram, another SSRI.

While anisocoria resulting from the use of SSRIs has been reported in the literature, it is paroxetine with which it is most commonly associated and, generally listed as a rare side effect (http://www.rxlist.com/cgi/generic/parox_ad.htm).

Only one case of anisocoria linked to the use of sertraline has been reported by Barrett (1994).

CASE

The patient is a 24-year-old married woman who works as a nurse at a general hospital. For the last two years, she has been undergoing treatment for rheumatoid arthritis, for which she has been received 10 mg of methotrexate once weekly and 2.5 mg/day of prednisolone. Initially, the daily dose of corticosteroid was 10mg/day. It was reduced after one year of treatment to its current level. Approximately one year ago, the patient was diagnosed as having fibromyalgia, for which the Physical Treatment and Rehabilitation Clinic prescribed 20 mg/day of citalopram and 10 mg/day of amitriptyline. Because of sedation, she stopped taking amitriptyline after only a short time.

She continued, however, to take citalopram regularly for six months. By the end of this period, although the citalopram has been effective, tremor in her hand was distressing. So, upon the advice of her doctor, she stopped taking that medication. This was followed by the recurrence of depression, which worsened over the last 6-7 months.

Upon coming to our clinic with complaints of depression and anxiety, with a diagnosis major depressive disorder according to DSM-IV criteria (1994) she was prescribed 50 mg/day sertraline and 0.5 mg/day alprazolam. On the 10th day of this treatment, the patient herself noticed the appearance of anisocoria. She urgently admitted to the Department of Neurology, where a neurological examination was performed. After this proved to be normal, a cranial MRI was performed. This, too, failed to find any pathological basis for the anisocoria, which resolved within one day. The question remained as to whether it had been a side effect of the medication or idiopathic benign anisocoria. It was decided to continue to monitor the patient. At this point, ophthalmologic examination to determine whether or not she had any eye disorder was negative. Anisocoria was observed and recorded by the psychiatrist, neurologist, and ophthalmologist each time. These examinations also failed to reveal any abnormalities. After one month of treatment, the doses of sertraline and alprazolam were increased to 75 mg/day (morning, single dose) and to 0.75 mg/day (at night, single dose), respectively. In the meantime, the patient noticed the difference in pupil size reoccurring. Sometimes it would last for only a few hours, other times extending until evening. After these attacks occurred for a total of 4-5 times during the second month of treatment, they ended altogether. At her next examination, 3 weeks later the pupils of both eyes were dilated, but the left side was larger than the right (4 mm, 2 mm respectively). After a while, as symptoms of anxiety decreased, which alprazolam was discontinued and replaced by mirtazapine 15 mg at night time. This resulted in a decline in depressive symptoms. Although anisocoria did not occur during the 3rd and 4th months of treatment, the patient said that she had noticed a 2-3 mm-bilateral dilation (equal) a few times in the morning.

DISCUSSION

Because she was a nurse by profession, our patient paid attention to detail and was knowledgeable. Therefore, she was sure about the changes in her pupil diameters first occurred. Ophthalmologic examination did not display any pathological findings and she had not encountered any similar condition during the following two years that she had regularly used other medications. Furthermore, evaluations in terms of drug interactions conducted with an internist concluded that no such interactions existed between sertraline and other medications she had been using. Realizing that this condition was not a cause for alarming, she continued to use her medications without interruption. Other important negative findings were there were no abnormalities in light reflexes and that both pupils were actually midriatic. This condition resembles the case where the appearance of anisocoria had been reported by Şener and Kıratlı (2001) with the sertraline usage. This case study describes an important mind confusing symptom due to an antidepressant, but does not dictate that sertraline treatment should be terminated. There is no explanation for this eye finding, nor does it seem to be suggestive of some serious underlying disorder.

REFERENCES

- American Psychiatric Association (1994) Diagnostic and Statistical Manual of Mental Disorders, 4th Edition. Washington, DC: American Psychiatric Association.
- Barrett J (1994) Drug points: Anisocoria associated with selective serotonin reuptake inhibitors. *BMJ*; 309: 1620.
- Dorell K, Cohen MA, Huprikar SS, Gorman JM, Jones M (2005) Citalopram induced diplopia. *Psychosomatics*; 46: 91-93.
- Gray R. Anisocoria 2003 updated. eMedicine Survey. Available from: <http://www.emedicine.com/emerg/topic29.htm> - 60k
- RxMed Survey: Available from: http://www.rxlist.com/cgi/generic/parox_ad.htm
- RxMed Survey: Available from: http://www.rxlist.com/cgi/generic/sertral_ad.htm
- Şener EC, Kıratlı H (2001) Presumed sertraline maculopathy. *Acta Oph Scand*; 79: 428-430.