Alleviation of Alopecia after Switching from Escitalopram to Duloxetine: a Case Report

ABSTRACT

Alleviation of alopecia after switching from escitalopram to duloxetine: a case report

Many psychotropic drugs, including SSRIs, lithium, carbamazepine, valproate, vigabatrin, antipsychotics, benzodiazepines, and tricyclic antidepressants have been implicated in cases with alopecia. Drugs may cause a variety of dermatological side effects, ranging from mild hair loss to total alopecia, from hypertrichosis to hirsutism. In this paper, we present a case where alopecia emerged due to escitalopram, and where this side effect was alleviated after switching to duloxetine; we also review the literature for antidepressant-related alopecia.

Keywords: Alopecia, duloxetine, escitalopram

INTRODUCTION

It has been reported that a number of psychotropic drugs, including Selective Serotonin Reuptake Inhibitors (SSRIs), lithium, carbamazepine, valproic acid (sodium valproate), vigabatrin, antipsychotics, benzodiazepines, and tricyclic antidepressants are related to hair loss (1-4). These drugs can cause trichopathies ranging from slight to complete hair loss and from hypertrichosis to hirsutism. Reason for these trichopathies is usually an increase or decrease of the speed of follicle proliferation due to the drugs. A follicle is a structure inside of which hair grows. It has been reported that hair loss occurs when drugs push follicles in the growth phase into the dormant phase. It is known that the life span of a follicle is three months. Given that a follicle entering the dormant phase can no longer proliferate, it dies after three months and is shed. This is why drug-related hair loss is usually noticed in the third month (1,4). The term alopecia is used for all types of hair loss, from light hair loss to a total loss of body hair (1,4).

SSRIs are effective and safe drugs that have been used for many years to treat depression. Only few cases of SSRI-related alopecia have been reported in the literature. There are cases related to escitalopram, fluoxetine, fluvoxamine, sertraline, paroxetine, and citalopram (5-14). It has been reported that the incidence of this rarely seen side effect varies between SSRIs and is higher in women than in men (15). While alopecia is usually seen at the beginning of SSRI treatment, there have been rare cases seen after long-term treatment.
As they are seen more frequently with high doses, we can assume that this side effect is dose-related. Discontinuing the drug or reducing the dose usually results in a resumption of hair growth. Some researchers suggest that vitamin and mineral supplements may play a role in the improvement; however, sufficient evidence has not yet been found (1).

This report, which includes a brief review of the literature concerning SSRI-related alopecia, presents a case where with the discontinuation of escitalopram and the start of duloxetine treatment the side effect of hair loss remitted. The patient provided written informed consent.

**CASE**

A 44-year-old married housewife applied to the policlinic with complaints of low spirits, lack of motivation, difficulties of concentration, lack of appetite, and insomnia, which had been present for the past two months. The patient, who had no history of alcohol, cigarette, or substance use, was applying to the psychiatric policlinic for the first time.

In the mental state examination, the patient was conscious and fully orientated, her speech spontaneous, thought process natural, her thinking included pessimistic content but no thoughts of suicide. No disorders regarding her general medical state were found.

With a diagnosis of first-episode major depressive disorder according to DSM 5 criteria, she was started on escitalopram 10mg/day. At control after one month, depressive symptoms had regressed and full remission been achieved. In the 3rd month of treatment, hair loss set in and became more evident in the 4th month. Liver, kidney, and thyroid function tests as well as full blood count were in the normal range. Other medical causes were excluded in a dermatological consultation. During this exclusion process, the dermatology department examined the case in detail and requested the necessary tests for potentially underlying thyroid pathologies, hormonal disorders, lack of minerals, and autoimmune diseases, but no pathological results were obtained. The dose of escitalopram was reduced to 5mg/day. At control another month later, it was seen that the patient was still in remission and hair loss decreased; thus, it was recommended to stop the use of escitalopram. As the patient did not want to enter a period without medication, she was started on duloxetine 30mg/day, increased to 60mg/day one week later. At control in the following month, no alopecia was found and the signs of depression had not flared up again. In the 6th month of duloxetine treatment, the patient was still in remission, and no hair loss was found.

**DISCUSSION**

In our case, it was thought that the developing alopecia was related to the use of escitalopram. It needs to be considered that other reasons to be excluded may be mental strain, substance use, diseases of the thyroid gland, kidneys, or liver, lack of iron, and malnutrition. Given that the patient’s hair loss began in the remission phase, it was not assumed to be a bodily manifestation of mental strain. Examination results also did not point to the presence of trichotillomania in the patient. The dermatological consultation did not find any pathologies that might cause hair loss; the patient did not use any drugs other than escitalopram, and discontinuation of escitalopram improved the alopecia. Therefore, it was assumed that the alopecia was related with the drug.

To demonstrate the relation between alopecia and a drug, it is recommended to observe the regression of alopecia after stopping the drug and its resumption after starting the same drug (15). As the patient did not want to go into a period without medication, a treatment with duloxetine was initiated immediately after stopping escitalopram. Duloxetine was selected because no reported cases of alopecia with this drug were found. A literature review showed that alopecia with SSRIs is mostly reported with sertraline, followed by citalopram (15). A patient file review for side effects made in Sweden found that in case reports corresponding to one million patient years each, there were 20.1 cases with sertraline and 4.5 cases with citalopram (15). However, we cannot assume these findings as evidence that these two SSRIs are causing a higher rate of alopecia. As these two SSRIs have been used for many years, it is possible that the higher number of case reports depends
on the more common use. In addition, the number of case reports is relatively low, and it is conceivable that a case may not have found its way into the literature. Therefore, it may be deceptive to focus on the number of cases reported for each SSRI until now. While there were cases improving with a reduction of dosage, there are also reports of improvement without dose reduction or even with an increase of the dose. Most of the reported cases are of women (14). This may be explained by the fact that women are using more SSRIs, are more concerned about their hair and more likely than men to report side effects regarding their hair to the doctor. In addition, the falling out of long hair is more noticeable. Nevertheless, we cannot exclude that SSRI-related alopecia is more common in women. A correlation has been found between blood serotonin level increase and alopecia (17). It may be assumed that SSRI-related alopecia is linked to a rise of serotonin.

In conclusion, alopecia is a rarely seen side effect of SSRI. It is possible that the incidence varies for different SSRIs, and women may be more likely to develop this clinical presentation. If alopecia developing during SSRI therapy is thought to be a side effect related to the drug, it is to be considered to reduce the dose or change the antidepressant treatment.

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### REFERENCES


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