

Venlafaxine Induced Hair Loss: a Case Report

Esra Yancar Demir¹

¹Ordu University, Faculty of Medicine, Department of Psychiatry, Ordu - Turkey



ABSTRACT

Venlafaxine induced hair loss: a case report

Agents within antidepressants which are most commonly associated with hair loss are tricyclic antidepressants. However, hair loss side-effect due to SNRIs are limited to case reports. A 33 years old, married female patient with two children was suffering from depression and anxiety symptoms such as anhedonia, insomnia once or twice a year since her twenties. For the last 4 months, she had developed depressive mood, unwillingness, pessimism, aggressiveness, impatience, anxiousness and constant feeling of fatigue, and she visited to our clinic, because she felt that her symptoms were getting worse. She was diagnosed with recurrent type of major depression according to DSM-IV, and venlafaxine treatment was started at 75mg/day dose. At the end of second month she reported complaint of hair loss. Her laboratory findings including thyroid function tests, vitamin B12 and D were all normal. The treatment was continued, but at the end of the 4th month hair loss problem was intolerable. After ruling out organic reasons, it was suspected that venlafaxine might be the cause, and it was tapered down and stopped. During the first month control after drug discontinuation, hair loss was clearly decreased, and it was completely stopped at the end of the second month. Clinicians should be aware that although hair loss due to venlafaxine is a rare problem, if patients receiving venlafaxine have this complaint, it should not be overlooked.

Keywords: Alopecia, antidepressant, depression, side effect, venlafaxine

ÖZET

Venlafaksine bağlı saç kaybı: Bir olgu sonumu

Antidepresanlar içinde saç dökülmesi ile en çok ilişkilendirilen ajanlar trisiklik antidepresanlardır. SNRI'lara bağlı saç dökülme bildirimleri olgularla sınırlıdır. 33 yaşında, evli, 2 çocuklu bayan hasta, 20 yaşlarından bu yana yılda 1-2 kez tekrarlayan anhedoni ve insomnianın eşlik ettiği depresif ve anksiyete belirtilerinden yakınmaktaydı. Yaklaşık 4 aydır, giderek arttığını tarif ettiği depresif duygudurum, isteksizlik, karamsarlık, sinirlilik, sabırsızlık, gerginlik ve yorgunluk şikayetleriyle polikliniğimize başvurdu. DSM-IV'e göre major depresyon tekrarlayan tip tanısı konup, daha önce de kullanıp fayda gördüğünü bildirdiği venlafaksin etken maddeli bir ajan 75mg/gün olarak başlandı. İkinci ayın sonunda hasta kontrole geldiğinde, saç dökülmesi yakınması olduğunu bildirdi. Tiroid fonksiyon testleri, B12 ve D vitaminini de içeren laboratuvar testleri normaldi. Tedavisine aynı şekilde devam edilen hasta, 4. ayın sonunda saç dökülmesinin tolere edilemeyecek düzeye geldiğini ifade etti. Soruna neden olabilecek diğer etkenler dışlandıktan sonra, saç dökülmesinin venlafaksine bağlı olabileceği düşünülüp, doz kademeli olarak azaltılarak kesildi. Venlafaksin kesildikten 1 ay sonra kontrole geldiğinde saç dökülmesi belirgin şekilde azalan hastanın, 2. ayın sonunda dökülmesi tamamen durmuştu. Klinisyenler nadir görülmesine karşın venlafaksinin yol açabileceği saç dökülmesi konusunda uyanık olmalı ve bu durumun atlanmaması için gerekli sorgulamanın yapılması gereklidir.

Anahtar kelimeler: Alopesi, antidepresan, depresyon, yan etki, venlafaksin

Address reprint requests to / Yazışma adresi:
Esra Yancar Demir,
Ordu University, Faculty of Medicine,
Department of Psychiatry, Cumhuriyet Mah.,
Cumhuriyet Yerleşkesi, 52200
Altınordu/Ordu, Turkey

Phone / Telefon: +90-452-225-0185

E-mail address / Elektronik posta adresi:
edyancar@yahoo.com

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INTRODUCTION

Hair loss is a common side effect caused by medical treatment with chemotherapeutics, antithyroid drugs, anticoagulants, triparanol, lithium, antiepileptics or vitamin combinations (1). There are also hair loss cases in the literature which resulted from use of antipsychotics (2,3). Among antidepressants, medication group which is most frequently associated with hair loss, is tricyclic antidepressants (4). There are limited case reports of alopecia due to selective

serotonin reuptake inhibitors (SSRIs) (5). In the human body, each hair follicle, growing whether on the scalp, brow or trunk, undergoes three phases; growing or anagen, involution or catagen and resting or telogen (6). The etiopathogenesis of hair loss related to medication has not been fully explained, but a variety of hypotheses have been proposed. It is thought that medication affects hair development in the anagen or telogen phases which leads to the hair loss. It is thought that psychogenic medications, especially affecting telogen phase, cause hair loss (7). If less than 25-50%

of hair falls out, it is clinically very difficult to determine the hair loss. Generally, hair loss is a subjective complaint reported by the patient, majority of whom notice it while washing or combing (8).

As some patients do not realize the relationship between the hair loss and the medications they use, they even do not mention as a complaint. If it is not a common side effect of the medication, physicians may not ask about the hair loss, either. Therefore, it becomes difficult to determine the true incidence (9). Venlafaxine is an antidepressant in the SNRI group. When the literature is reviewed, there are two or three cases reporting hair loss associated to venlafaxine use (10).

We aim to discuss this rare side effect of venlafaxine, which is frequently missed because patients do not report as a complaint, in the present case report. Written informed consent.

CASE

A 33 years old female married patient, who was graduated from a university, and working as an administrator in a public institution had her first psychiatric complaints in her 20s with depressive and anxiety symptoms, such as depressive mood, anhedonia, insomnia, and grief. Since then, she had one or two episodes in a year, which were mostly triggered by stress factors. Situational depressive mood periods occurred until now, but they mostly resolved within 1-2 months without any medications. However, in the latest episode, complaints of depressive mood, lack of motivation, grief, irritability, impatience, anxiety, anxiousness about bad things to happen, and insomnia were more severe, and continued nearly longer than 4 months. Therefore, the patient applied to our outpatient clinic with feeling more severe symptoms than the previous episodes. Until now, the patient had tried many antidepressants, such as fluoxetine, escitalopram, duloxetine, venlafaxine and reboxetine, but did not benefit from increased dose of venlafaxine. She told that she had used each medication as monotherapy for 2-3 months without doctor's advice, and then stopped taking it. She used venlafaxine for the longest period when compared to other

antidepressants, as nearly 5 months. She told that previously venlafaxine resolved symptoms completely 8-9 years ago, but she stopped taking it due to weight gain. Considering patient's wishes and previous medication history, she was diagnosed with recurrent-type major depressive disorder according to the DSM-IV-R (Diagnostic and Statistical Manual of Mental Disorders), and treatment was started with venlafaxine at 75mg/day dose. During her clinical control after 1 month, patient's complaints were resolved by 50%. She was advised to continue the treatment at the same dose, and she complained of hair loss at her second control visit. For differential diagnosis of hair loss, thyroid function tests, and blood tests including B12, iron, zinc levels and vitamin D performed, and they were all reported within normal limits. Dermatology consultation was requested, and it no pathology was determined, so it was concluded that hair loss might be seasonal. The same treatment was continued, but patient's complaint of hair loss continued and it reached intolerable levels at the 4th control visit. She did not even want to comb her hair as each time at least 10 hair strands were falling out. As complaint of hair loss started with venlafaxine treatment, and no organic etiology was determined, it was considered that the hair loss might be associated with venlafaxine treatment, so the dose was tapered down and discontinued. Expressing that she required no more treatment, the patient refused to take another antidepressant. One month later, the hair loss was clearly reduced, and it was completely stopped at her month 2 control.

DISCUSSION

Venlafaxine is an antidepressant in the serotonin-noradrenaline reuptake inhibitor (SNRI) group, which is well-tolerated, has more rapid onset of action, and lower side-effect profile (11,12). Common side effects of venlafaxine are weakness/fatigue, hypertension, vasodilation, loss of appetite, constipation, nausea, vomiting, abnormal dreams, decreased libido, and dizziness (11). The majority of cases with hair loss associated to venlafaxine were reported as letters to

the editor, and a very few case reports (10,13,14). Similar to our case, it was observed that all cases were female in the previous case reports. Although this may be related with women being interested more in their appearances, and they were more likely noticing hair loss, because many of women had long hair; men at the similar ages have already lost their hair. Alopecia associated to psychotropic medications generally occurs within the first few months after initiation of medication, which may only be resolved by medication discontinuation. Within 3-5 months after discontinuation, the hair loss is stopped. Besides, medications may not only cause hair loss, but also changes in the structure and color of the hair (5). One of the most significant complaints of our patient was she felt that her hair was thinned, so it started to break off easily during combing (5). The mechanism of hair loss associated to medication has not been fully explained, but various hypotheses have been proposed such as hair growth control was related to sympathetic nervous system; dopaminergic treatments might cause hair loss; melatonin, a marker of the hair growth cycle, was synthesized from serotonin, and changes in serotonin homeostasis might change balance between the hair growth and loss (5). It was thought the hair loss might be triggered by effects on dopamine receptors, and the loss was more marked at venlafaxine doses of $\geq 225\text{mg/day}$. On the other hand, it was also emphasized that this situation might be related to individual sensitivity rather than a specific side effect

of the drug (15). The most important way to clarify hair loss associated to medication was emphasized to observe cessation of hair loss after the medication was dechallenged, and its recurrence when the medication was rechallenged (5). After ruling out organic reasons, we discontinued medication in our patient to determine whether the loss was due to venlafaxine, and we observed that the symptom was resolved within a short time of discontinuation. Besides, we definitely determined the hair loss was associated to venlafaxine, because our patient was using no other medicine. However, if it is considered that hair loss from the scalp is clinically noticeable at the rate of 25-50% after initiation of the treatment, it is clearly necessary to inquire about this rare side effect with more common ones. It should not be forgotten that if neglected this rare side effect most probably deteriorate treatment compliance, and cause the medication discontinuation.

Contribution Categories	Name of Author
Follow up of the case	E.Y.D.
Literature review	E.Y.D.
Manuscript writing	E.Y.D.
Manuscript review and revision	E.Y.D.

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