Case report / *Olgu sunumu*

Quetiapine induced hair loss in an adolescent case

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ABSTRACT

Hair loss is a frequently seen side-effect of psychotropic medicaments. Beside the psychotropic medicaments valproic acid and lithium, mostly blamed for alopecia, also cases due to use of antidepressants and typical/atypical antipsychotics have been reported. However, studies on alopecia caused by atypical antipsychotic drugs are scarce and limited by case reports. In this paper, a 16-year-old adolescent female patient developing diffuse alopecia associated with use of quetiapine and recovering after cessation of the medicament is presented. As far as we know, this is the first case reporting quetiapine-associated alopecia in an adolescent. ***(Anatolian Journal of Psychiatry 2015; 16(2):143-145)***

Key words: *quetiapine, alopecia, side effects, adolescent*

Bir ergen olguda ketiyapin kullanımına bağlı saç dökülmesi

ÖZET

Saç dökülmesi psikotrop ilaçların sık görülen bir yan etkisidir. Ancak atipik antipsikotiklere bağlı saç dökülmesi ile ilgili yayın sayısı oldukça azdır ve olgu sunumlarıyla sınırlıdır. Bu yazıda, ketiyapin başlanması sonucu ortaya çıkan ve tedavinin sonlandırılmasıyla düzelen, yaygın saç dökülmesi olan 16 yaşında ergen kız olgu bildirilmiştir. Bildiğimiz kadarıyla olgumuz, ergenlik yaş grubunda ketiyapinle ilişkili saç dökülmesi olduğu bildirilen ilk olgudur. ***(Anadolu Psikiyatri Derg 2015; 16(2):143-145)***

Anahtar sözcükler: *Ketiyapin, alopesi, yan etkiler, ergen*

INTRODUCTION

The term alopecia describes the spectrum of loss of hair in every phase ranging from a simple defluxium to a total hair loss. Alopecia is seen most frequently in scalp hair. Alopecia is quite frequently encountered in daily medical practice. Among causes of alopecia, genetic factors are in the first line; the other causes are pregnancy, thyroid disorders, iron-deficiency anemia, infectious diseases, drugs, malnutrition and psychological stress. Alopecia is not a life-threatening disorder, but may have a negative effect on social life.[1]

Drug-induced alopecia is a quite frequently seen side-effect. It has been reported that many medicaments may cause alopecia by changing the normal cycles of hair follicle growth, that is, from the long growing phase suddenly to resting phase.[2] Diffuse alopecia can be caused by antineoplastic chemotherapy, antithyroid medicaments, oral contraceptives, anticoagulants, antiepileptics, beta-blockers, nonsteroid antiinflammatory drugs and psychotropic drugs.[2] Drug-induced alopecia is generally diffuse, leaves no

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scar and reversible with cessation of the responsible drug.[2]

Alopecia caused by psychotropic medicaments is a frequently seen disorder.[3] Beside the psychotropic medicaments valproic acid and lithium, the mostly blamed for alopecia,[4-8] also cases due to use of antidepressants[9-12] and typical/atypical antipsychotics[13-1] have been reported.

In this paper, a 16-year-old female adolescent developing diffuse alopecia associated with use of quetiapine and recovering after cessation of the medicament is presented.

CASE

A 16-year-old female adolescent referred to our outpatient clinic with complaints of 'depressed mood, hopelessness, irritability, markedly diminished interest, fatigue, psychomotor retardation, diminished concentration, decrease in academic achievement, loss of appetite, difficulty in falling asleep and frequent awakenings at night'. Her history revealed that her complaints had started a month ago, she had had no psychiatric problems formerly, and she had not referred to a psychiatric clinic before. She stated that she referred to our outpatient clinic upon increase in her complaints.

Her history showed that she had had no problem associated with the stages of motor-mental development, no epileptic seizure/trauma or a serious disease. As a pupil she had readily learned reading and writing and she had been generally a cheerful and loveable child maintaining good relation to others of the same or near age. In the family history, the mother had started to take citalopram four years ago because of diagnosed depression and upon benefit of therapy, stopped taking any medicament two years ago.

In psychiatric examination, she was an adolescent showing her age. Her self-care was decreased. Her communication with the doctor was limited. She was conscious and had complete orientation. Her attention and concentration were reduced. Her memory, perception, judgement and insight were normal. She spoke little. The thought flow was slow and included thoughts of her being worthless. She had a depressed mood and her affectivity was dysphoric. She had an apparent psychomotor retardation. She complained of loss of appetite, of difficulty in falling asleep at night and of frequent awakening at night. The results of the physical and neurologic examinations were within normal range. At the end of psychiatric evaluations, the patient received the diagnosis of major depressive disorder according to the DSM-IV-TR criteria. The therapy was started with sertaline 25 mg/day, to be increased to 50 mg/day after five days. After four weeks of therapy with sertaline, in the second evaluation of the patient, her depression showed some improvement, but her sleep problems continued with the same intensity. Thereupon, the dose of sertaline was increased to 75 mg/day and quetiapine 50 mg/day was added to the therapy. In the third evaluation after four weeks, she stated that her depression improved quite well and she could sleep better at nights but experienced an intense hair loss in the last one week. The investigations to detect possible medical causes included complete blood count, liver/kidney function tests, thyroid function tests, hypothalamic-pituitary-gonadal axis hormone assessment and assessments of serum iron, copper and zinc levels; all were within normal ranges. The patient was assessed by the dermatology clinic and no additional dermatological disease was found that could induce alopecia. The patient was not using any other drug except sertaline and quetiapine and she had no history of alopecia. Although the dose of sertaline was increased in the last control, the hair loss was attributed to quetiapine and consequently the medicament was discontinued. No other therapy for alopecia was given. Upon subsidence of her depression and normalization of her sleep, her therapy was continued with sertaline 75 mg/day. In her follow-up control after one month, the patient had no complaints of hair loss.

DISCUSSION

Atypical antipsychotics have been increasingly used in child and adolescent psychiatry in recent years. Atypical antipsychotics in the practice of child and adolescent psychiatry are frequently used in cases of psychosis, mood disorders, tics, Pervasive development disorders, mental retardation, attention deficit/hyperactivity disorder, conduct disorders and eating disorders.[18]

Although atypical antipsychotics have better side-effect profiles when compared to typical antipsychotics, they may still cause side-effects in many organ systems. The most of the dermatologic side-effects of antipsychotics are benign and can readily be cured. The reports of dermatologic side-effects caused by antipsychotics include urticaria, examatous eruptions, pruritus, photosensitivity, skin pigmentation, fixed drug eruptions and alopecia.[19]

In the literature, there are only a few reports on alopecia cases caused by atypical antipsychotics; risperidone, quetiapine, and olanzapine.[2,15-17] As far as we know, our case is the first case in the literature presenting quetiapine-associated alopecia in an adolescent. McLean and Harrison-Woolrych[17] have reported two cases of quetiapine-associated alopecia in adults. One of the cases was a 34-year old woman with psychotic depression who was on sitalopram 20 mg/day and quetiapine 25 mg/day increased gradually up to 100 mg/day. Six weeks after increasing the dose of quetiapine, the patient experienced diffuse hair loss which was then resolved by stopping quetiapine. The second case reported in the same paper was a 34-year-old woman with bipolar disorder who received quetiapine 300 mg/day and zopiclone 7.5 mg/day and complained of hair loss 20 days after the start of therapy. The patient also had had hair loss in former therapy with valproic acid. The patient's alopecia resolved after quetiapine was cut off.[17]

There is no test to determine whether alopecia is due to drugs or not. The suggestion for differential diagnosis is to cut off the drug and watch for the formation of new hair.[3] Our case complained of hair loss three weeks after the start of quetiapine therapy; the patient's alopecia resolved after quetiapine was cut off. Also no cause of organic hair loss was found in the patient's history, blood tests and dermatologic consultation.

The mechanism of alopecia caused by psychotropic medicaments has not been fully clarified. According to a hypothesis, psychotropic medicaments may cause alopecia by affecting the serum levels of zinc and selenium which are essential for hair growth. However, the efficacy of zinc and selenium as supplementary drugs in alopecia has not been proven until now.[15,16]

The alopesia associated with atypical antipsychotics is rare, but when seen, it is an important side-effect that may ruin the compliance to treatment and affect the social life of the patient. For this reason, clinicians should watch out for alopecia as well as for other side-effects. The relevant future studies with large sampling may contribute in large scale to the clarification of the subject and determination of the mechanisms involved in drug-induced alopecia.

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