

Aripiprazole-related alopecia: A case report

Arzu Caliskan Demir, Ozlem Ozcan

Inonu University Faculty of Medicine, Department of Child and Adolescent Psychiatry, Malatya, Turkey

Dear Editor,

Alopecia is defined as hair loss of more than 100 hairs per day. The pharmacopoeial alopecia is a reversible side effect that usually manifests itself with noncicatricial diffuse hair loss which occurs in the first 3 months using drugs and disappears after the cessation of treatment. Today, the agents most responsible for this side effect are antineoplastics, antithyroid drugs, and antiepileptics. Psychotropic agents are also thought to cause alopecia.

Among psychotics, the ones which cause alopecia most are mood stabilizers, antidepressants and antipsychotics. Besides alopecia, thinning in hair is also its common side effect. Fluoxetine and sertraline among antidepressants are agents that cause alopecia (1).

However, a limited number of case reports are available in the literature on alopecia induced by aripiprazole from antipsychotics. In this case, an 11-year-old girl with aripiprazole-induced hair loss will be discussed.

S.K is an 11 years old girl. She is the 4th child of a 47-year-old civil servant father and a 44-year-old housewife mother of 4 children. Patient with moderate mental retardation was admitted due to irritability. It was learned that she received moderate mental retardation diagnosis in the epicenter and that her temper was increased for about 1 year, she had insomnia, harmed her environment and shot herself and her mother. It was learned that in the epicenter they applied for this reason, it was started 0.50 mg / day of risperidone, and that there is no benefit and the parent cut out of the drug due to the increase of appetite.

According to the developmental history, it was learned that the patient born in normal spontaneous vaginal delivery and had been in the incubator for about 20 days. It was learned that she is back from her coevals since her birth; she walked at the age of 3, started talking at the age of 3.5, and took toilet training at the age of six. It was learned that there were 3 times of esophageal dilatation due to achalasia in her background and there is no complaint

now. There was no obvious feature in her family history.

On her psychiatric examination, it was determined that her consciousness was open and co-operative, her self-care was diminished, and she had communication with the interviewer and gave mental retardation impression. Intermediate mental retardation was detected by the WISC-R intelligence test.

Moderate mental retardation + irritability were considered and aripiprazole was started 2.5 mg / day and the patient was called for control one week later. We learned that the patient who was evaluated in the control had obvious hair loss which started 3 days after starting to the treatment, similar complaints had never been done before. Dermatology and pediatrics were applied in this process, the examination was made, and the blood screen was evaluated but there was no problem.

The treatment was interrupted due to the fact that alopecia is related to the patient. One week later, it was learned that hair loss was reduced in the control, and it was learned that it disappeared completely after 1 month. The complaints of the patient who started taking the low dose haloperidol are partially regressed and her follow-up and treatment are continuing.

Aripiprazole is an atypical antipsychotic with a different mechanism of action than antipsychotic drugs in use. Aripiprazole, which acts on both postsynaptic dopamine D2 and presynaptic autoreceptors, is considered as a partial dopamine agonist.

The most frequently reported side effects associated with the use of aripiprazole are insomnia, tremor, akathisia, nausea and vomiting (2). Another side effect of antipsychotic use is dermatological side effects. Most of these side effects are benign and easily treatable. The most common dermatologic side effects which are associated with psychotropic agents are reported as rash, exanthematous rash, itching, photosensitivity, skin pigmentation, drug eruption, alopecia, erythematous

Received: 20.06.2017 Accepted: 04.08.2017

Corresponding Author: Arzu Caliskan Demir, Inonu University Faculty of Medicine, Department of Child and Adolescent Psychiatry, Malatya, Turkey. E-mail: arz-36@hotmail.com

polypharmacy, Stevens-Johnson syndrome, vasculitis, toxic epidermal necrolysis, erythroderma (3).

Another dermatological side effect caused by the use of aripiprazole is the alopecia. There are few case reports in the literature on aripiprazole and alopecia. In a case presented in 2015, hair loss induced by aripiprazole in a 30-year-old woman with a diagnosis of obsessive-compulsive disorder and depressive disorder and aripiprazole was reported (4).

Pathological mechanism of hair loss due to aripiprazole and other psychotropic drugs have not yet been fully elucidated. Direct toxic effects of psychotropic drugs to the hair follicle matrix must be considered as the reason of hair loss in this case. The mechanism of drug-induced hair loss is called telogen effluvium and involves a premature interruption of growth with an early entry of anagen follicles into the resting phase (5). In addition, in the use of psychotropic agent, the reasons such as changes in the level of zinc, selenium which are involved in hair growth, and personal sensitivity are asserted (6).

There is no specific treatment for drug-induced alopecia. Fortunately, it is usually reversible when the medicine is discontinued or the dosage is reduced. Keeping the

initial dose low at the beginning of the treatment, followed by frequent intervals in terms of possible side effects after initiation of the treatment, may reduce the risk of skin reaction. Long-term studies are needed to better understand and manage the side effects that clinicians do not often encounter.

REFERENCES

1. Turkoglu S, Fluoxetine-and Sertraline-Related Hair Loss in a Teenager: A Case Report. *Klinik Psikofarmakoloji Bülteni-Bulletin of Clinical Psychopharmacology* 2013;231:77-80.
2. Naber D, Lambert M. Aripiprazole: a new atypical antipsychotic with a different pharmacological mechanism. *Prog Neuropsychopharmacol Biol Psychiatry* 2004;28(8):1213-9.
3. Yücel A, Karakuş, G, Gunaştı S. Psikotrop ilaçların Dermatolojik Yan Etkileri ve Tedavi Yaklaşımları. *Klinik Psikofarmakoloji Bulteni* 2008,18(3)235-44.
4. Bilgin YY, Yagci I, Tunc S, Atagün Mİ. Hair loss due to aripiprazole use: a case report. *The European Research Journal* 2015;1(2):85-7.
5. Piraccini BM, Lorizzo M, Rech G, Tosti A. Drug-induced hair disorders. *Curr Drug Saf* 2006;1(3):301-5.
6. Kuloglu M, Korkmaz S, Kilic N, Saglam S, Gurok MG, Atmaca M. Olanzapine induced hair loss: a case report. *Klinik Psikofarmakoloji Bülteni-Bulletin of Clinical Psychopharmacology* 2012;22(4),362-6.