



ORIGINAL RESEARCH PAPER

Psychiatry

ARIPIPRAZOLE INDUCED ALOPECIA: A CASE REPORT

KEY WORDS: aripiprazole , alopecia , drug induce hairloss

Dr Girish G Ghanate

Junior Resident ,RRMCH

Dr Asha C S

Senior Resident ,RRMCH

ABSTRACT

Drugs induce a wide spectrum of hair loss, ranging from barely detectable shedding to irreversible baldness. Drug-induced alopecia is usually a diffuse non-scarring alopecia which is reversible upon withdrawal of the offending drug¹. Aripiprazole has a partial agonist activity at D2 receptors and antagonist activity at serotonin 5HT2A receptors². Literature pertaining to aripiprazole induced hairloss is scarce. Here we report a case of hair loss due to aripiprazole use that reversed back right after stopping the treatment.

INTRODUCTION

Alopecia is defined as hair loss of more than 100 hairs per day. The pharmacopoeial alopecia is a reversible side effect that usually are non-cicatricial diffuse hair loss which occurs in the first 3 months of using drugs and disappears after the cessation of its usage. Today, the agents most responsible for this side effect are antineoplastics, anti thyroid drugs, and anti epileptics. Psychotropic agents are also thought to cause alopecia³. Depending on type of drug, dosage and patient susceptibility, hair loss presents as telogen effluvium, anagen effluvium or both⁴

Aripiprazole is a quinolinone derivative and its role in management of schizophrenia and bipolar disorder is well established. it is primarily a dopamine partial agonist, but it also has a substantial binding affinity towards 5HT2A, 5HT1A and D3 receptors, this complex binding profile of Aripiprazole makes it very difficult to predict the therapeutic benefits as well as the unwanted interactions and side effects⁵

CASE REPORT

A 32 years old married lady, working as an assistant beautician, visited our outpatient clinic along with her brother, with complaints of increased talkativeness, irritability and decreased sleep, which were episodic in nature from the past 9 years. For which she had been diagnosed with bipolar affective disorder and treated with Ziprasidone 40mg and Clonazepam 0.5mg. She had no significant family history of psychiatric illness or past history of chronic disease/surgery and substance abuse. Her General physical examination (GPE) and systemic examination revealed no significant abnormalities. Current Mental status examination showed the patient to be oriented to time/place/person, her general appearance and selfcare were within normal. Her psychomotor activity and volume of speech were increased while her reaction time was decreased. She had an irritable mood and denied delusions or hallucinations. On evaluation of her higher mental functions, attention was not sustained and concentration was decreased. While her Memory were intact, her Social and personal judgment were impaired making her have an insight of grade 2. With the above presentation, a clinical diagnosis of bipolar affective disorder current episode mania without psychotic symptoms was made as per ICD-10 criteria. Her baseline score on Young mania rating scale (YMRS) was 34 and she had a BMI of 24. As she had not responded to Ziprasidone 40mg it was cross tapered and Olanzapine 10mg along with sodium valproate 500 mg was started. In her subsequent visits patient reported improvement and her YMRS reduced to 23 but her BMI increased to 26. As patient was maintaining well for more than 6 months and in view of the weight gain, Olanzapine was reduced to 5mg and Aripiprazole 10mg was started and lifestyle modifications were advised.

In her subsequent monthly follow up though her BMI reduced

to 22, but the patient complained of increased hair loss. The patient was referred to a dermatology in view of this and no dermatological causes were found. She scored 9 on the Naranjo adverse drug reaction probability scale⁶, indicating moderate severity. A temporal relationship between initiation of aripiprazole and hairloss was suspected, hence it was discontinued. As otherwise the patient, was asymptomatic, T. Olanzapine 5mg was continued. During the follow-up examinations, it was observed that the complaint of hair loss reduced by 1 month and totally stopped 3 months later. On rechallenging patient had loss of hair with tab arpiprazole 5mg and hence it was stopped and tab olanzapine was continued.

DISCUSSION

Drug induced alopecia is a well established phenomenon where the alopecia is of diffuse, non-scarring type and is reversible upon withdrawal of the drug⁷. A temporal association between the onset of hair loss and commencement of a medication is a diagnostic prerequisite⁸. In the current patient also we see a temporal relation between beginning and ceasation alopecia with aripiprazole use and stoppage respectively, which was reiterated by the subsequent aripiprazole rechallange.

Drugs produce hair loss by interfering with the hair cycle, through 2 main different modalities: (i) by inducing an abrupt cessation of mitotic activity in rapidly dividing hair matrix cells called anagen effluvium or (ii) by precipitating the follicles into premature rest called telogen effluvium⁹.

Drug induced alopecia is usually telogen effluvium type, there can also be several triggers including fever, hemorrhage, and hyper / hypothyroidism for it. Diagnosis of alopecia secondary to a psychotropic medication can be difficult¹⁰, especially in the case of aripiprazole as drug induced alopecia is not a documented side effect its use. The exclusion of these potential confounding factors in our patient strengthens our proposed association between aripiprazole and drug induced alopecia⁸.

CONCLUSION

Through this first of its kind in the Indian context case report, we would like to draw the focus of treating physicians to be vigilant for the possible aripiprazole induced alopecia, a rare and undocumented side effect. Which could be a major factor for non-adherence to medications and hence treatment outcome in our patients.

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