Letter to Editor

Alopecia Areata Monolocularis in Clozapine-induced Hypereosinophilia

INTRODUCTION

Eosinophilia is seen in around 1% in clozapine-treated patients with a benign transient course, and in a few cases it has been reported to be a predictor of subsequent complications like eosinophilic colitis.1 The prevalence of skin lesions including infections, dermatitis, hyperkeratosis, pilosebaceous disease, androgenic alopecia, xerosis, and stasis, were higher in patients with schizophrenia.2 To the best of our knowledge alopecia areata as a secondary complication to clozapine-induced hypereosinophilia, has not been reported. Here we report a case of alopecia areata monolocularis in a patient with clozapine-induced hypereosinophilia which developed within 3rd week of initiation of clozapine which warranted its cessation.

CASE

A 38-year-old female with a diagnosis of treatment-resistant schizophrenia paranoid subtype, started on clozapine therapy. Patient’s baseline blood counts were total leucocyte count 7500/mm³, absolute neutrophil count 5190/mm³, absolute eosinophil count (AEC) 150/mm³, and rest cell counts within normal range. The patient received an initial dose of 25 mg/day, which was gradually increased to 150 mg/day in 2 weeks. There was a gradual improvement in her psychotic symptoms and her Positive and Negative Syndrome Scale score reduced from 82 to 56. Weekly blood tests showed only rising trend of eosinophil counts which increased from 150/mm³ to 950/mm³ in 2 weeks and 2360/mm³ at the end of 3 weeks. During the course of clozapine treatment, there was no history of fever, itching, generalized rash, respiratory complaints, passage of worms in stools, joint pain, and local or generalized lymph node enlargement. On investigations, the morphology of eosinophils on peripheral blood smear, ova cyst in stool test, thyroid function, chest X-ray, echocardiography, and computerized tomography scan of thorax found to be normal. She was also being monitored for serial serum amylase, serum lipase, creatine kinase-MB which was found to be in normal range. Subsequently, the patient was given a trial of albendazole 400 mg/day for 5 days, but there was no effect on AEC. In view of the same, Clozapine dose was not increased further. By the end of 3 weeks, there was single patch hair loss [Figure 1]. She was diagnosed with alopecia areata monolocularis in consultation with a dermatologist. Trichoscopic and histopathological studies were done and suggestive of mild eosinophilic infiltrates in peribulbar area. Considering rising trend of AEC and its associated complications, clozapine therapy was withdrawn, which was followed by gradual decrease in AEC to 240/mm³ in next 3 weeks with no further hair loss. There was hair regrowth reported after around 6-8 weeks of withdrawing clozapine therapy.

DISCUSSION

Hypereosinophilia is an allergic manifestation of various drugs that usually disappears when the causative drug is discontinued. Alopecia areata monolocularis is a variant called “spot baldness.” In most cases, this variant is the beginning phase of this autoimmune disease3 or may have eosinophilic peribulbar infiltrates.4 In view of lack of literature support and no clear consensus about exact etiopathogenesis of clozapine-induced eosinophilia and its dermatologic manifestations, it is difficult to conclude a causal relation, but considering Naranjo adverse drug reaction probability scale5 score of 7 and previous studies4 in index case the pathophysiology of Alopecia seems to be related to hypereosinophilic state. This report may be the first case report of clozapine-induced hypereosinophilia developing alopecia areata monolocularis which warranted its withdrawal.

Shailesh Jha, Amit Khanna
Department of Psychiatry, Institute of Human Behavior and Allied Sciences, New Delhi, India

Figure 1: Alopecia areata monolocularis

© 2016 Indian Psychiatric Society | Published by Wolters Kluwer - Medknow
Dear Editor,

Alcohol has been identified as a major contributor to global burden of disease. Excessive use of alcohol has been found to be associated with increased morbidity and mortality across all regions of the world. It has also been recognized as a major public health problem in South Asia including India.

The National Family Health Survey (NFHS) suggested an increase in alcohol use among males in the NFHS-3 as compared to NFHS-2 as one-third of men reported alcohol use.

According to the Global Status Report on Alcohol and Health 2011, 25% and 15% of male and female drinkers, respectively, were identified as heavy episodic drinkers.

There has been an increase in per capita consumption of alcohol in India over the past few years, and the age of onset of alcohol use has also declined.

Alcohol dependence, the most dysfunctional pattern of alcohol use, has gained most attention with regards to the disability associated with alcohol use. However, excessive use of alcohol in nondependent pattern is also associated with adverse consequences with experts estimating that a large proportion of harm attributable to alcohol may be related to harmful and hazardous use of alcohol rather than its use in dependent pattern.

Alcohol use disorder identification test (AUDIT), developed by World Health Organization, has been found to be a reliable and valid tool for screening problem alcohol use.

Screening tests help to sort out persons who probably have a disease or problem from those who do not. Screening helps to categorize the individuals in different risk categories and subsequently make informed decisions about the nature and intensity of intervention that need to be offered.

The AUDIT was initially developed in English language and later has been translated, adapted, and validated in many languages. However, the Hindi translation of AUDIT is not available. A Hindi version of AUDIT is now being developed following permission from WHO. The development of the Hindi version of the AUDIT is being carried out using the recommendations by Sousa and Rojjanasrirat.

The first stage of development of Hindi version of the AUDIT involved the steps of:
1. Translation of the AUDIT into the Hindi language;
2. Comparison of the two translated versions of the instrument (Hindi 1 and Hindi 2);
3. Validating the Hindi instrument against the English version; and
4. Field testing of the Hindi instrument for acceptability, understandability, and feasibility.

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

How to cite this article: Jha S, Khanna A. Alopecia areata monolocularis in clozapine-induced hypereosinophilia. Indian J Psychol Med 2016; 38:84-5.

REFERENCES

1. Karmacharya R, Mino M, Prirl WF. Clozapine-induced eosinophilic colitis. Am J Psychiatry 2005;162:1386-7.
2. Wu BY, Wu BJ, Lee SM, Sun HJ, Chang YT, Lin MW. Prevalence and associated factors of comorbid skin diseases in patients with schizophrenia: A clinical survey and national health database study. Gen Hosp Psychiatry 2014;36:415-21.
3. Kulkarni S, Punia RS, Kundu R, Thami GP, Mohan H. Direct immunofluorescence pattern and histopathological staging in alopecia areata. Int J Trichology 2014;6:164-7.
4. Yoon TY, Lee DY, Kim YJ, Lee JY, Kim MK. Diagnostic usefulness of a peribulbar eosinophilic infiltrate in alopecia areata. JAMA Dermatol 2014;150:952-6.
5. Naranjo CA, Busto U, Sellers EM, Sandor P, Ruiz I, Roberts EA, et al. A method for estimating the probability of adverse drug reactions. Clin Pharmacol Ther 1981;30:239-45.