Alopecia Areata during Switching from Risperidone Long-acting Injection to Paliperidone Palmitate in Treating Schizophrenia: A Case Report

Introduction

Alopecia areata is characterized by the abrupt appearance of round or oval, non-scarring, flat, single or multiple areas of alopecia. Alopecia areata often bother and distress patients. The exact cause of alopecia areata is still unknown. Most evidence is consistent with an autoimmune disease to which both genetic predisposition and environmental factors contribute. The possibility of a causal influence of emotional stress, especially of stressful life events, on the course of alopecia areata also has long been postulated. Several psychotropic medications, such as lithium, valproate, carbamazepine, and tricyclic antidepressants, are reported to be related with alopecia areata or diffuse hair loss over the scalp[1]. But alopecia areata is the rare adverse effect of antipsychotic use. We present a case of a patient with schizophrenia, who developed alopecia areata during switching from risperidone long-acting injection to paliperidone palmitate injection.

Case Report

This is a 40-year-old single male patient, who had history of schizophrenia for 18 years. He could do some house work and social activity under the treatment. Due to frequent injection and clinic visit, we changed risperidone long-acting 37.5 mg injection every two weeks to paliperidone palmitate intramuscular 100 mg every month then. After a two-month medication change, he developed the clinical sign of alopecia areata. There was no change of his other medications, including lorazepam and trihexyphenidyl. He did not have any physical or autoimmune problems. He also denied recent life stressors and other medication use. After having received paliperidone palmitate 100 mg intramuscular for three months, patient had worse alopecia areata and diffuse hair loss. We changed paliperidone back to risperidone 4 mg oral daily. He regained lost hair gradually in the following 6 months.

Comment

Antipsychotic-induced alopecia areata is a rare side effect. Limited case reports exist on antipsychotic-induced alopecia areata[2-4]. One schizophrenic patient received haloperidol decanoate long-acting injection and one major depressive disorder patient received oral haloperidol are reported related with alopecia areata[2, 3]. One schizophrenic and two manic-depressive patients developed alopecia areata after the administration of zotepine[4]. Our case is the first report...
about alopecia areata during switching from long-acting risperidone injection to paliperidone palmitate injection.

Although the relation between alopecia areata and paliperidone palmitate are unclear in our patient, antipsychotic medication change may play the rôle in this case. The exact mechanism of paliperidone or other psychotropic drugs related alopecia areata is still unclear. Since zinc and selenium are considered important in the growth of hair, some believe that antipsychotics may affect the process of chelation [1-5]. CD4+ and CD8+ T lymphocytes have a rôle in the pathogenesis of alopecia areata [6]. Several studies have shown different lymphocyte cells in schizophrenia patients, and altered function after antipsychotic treatment [7-10]. Alteration of immune system due to antipsychotics change may be the mechanism of alopecia areata. Besides, stress related to alopecia areata in this patient needs to be considered. Stress from life events or antipsychotics change are necessary to be considered.

Alopecia areata is rare adverse effect of antipsychotics. Clinicians should screen for alopecia areata in schizophrenia patients, especially when they changed the antipsychotics. Further studies exploring the relationship between antipsychotic and alopecia areata and the possible mechanism of alopecia are needed. (This case report was approved by the institutional review board of Changhua Christian Hospital. The authors declare no potential interest in writing this report.)

References
