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Letter to the Editor

CASE REPORT ON HAIR TURNING CURLY AFTER LITHIUM THERAPY

Dear Editor,

Lithium is the first element of the 1A group of the periodic table (Yung 1984). Therapeutic use of lithium in psychiatry was started by John Cade in 1949 on patients in manic episodes which gave positive results (Parker 2012). Today, lithium use has a place in the treatment of many mental disorders, especially bipolar disorder (BD). Frequently recommended for use in psychiatric treatment guidelines, lithium has a wide range of side effects, foremost on the neuroendocrine system, though it may also affect the gastrointestinal and cardiovascular systems, renal functions and also causing polydipsia, polyuria, memory disorders, tremor, skin rashes, hypothyroidism, dry mouth and hair loss (Rao et al. 1983).

However, hair turning curly had not been reported in the literature previously as a side effect attributed to lithium. In this article, two cases with hair becoming curly after the use of lithium are presented.

Case 1: The 58-year-old married female patient had been monitored with bipolar disorder (BD) for six years and was hospitalized for depressive episode treatment. Lithium 900 mg/day was added to her ongoing treatment with valproate (1000 mg/day), bupropion (300 mg/day), mirtazapine (15 mg/day), quetiapine (50 mg/day) and was discharged when her condition improved. Bupropion and mirtazapine treatments were discontinued during follow up, and olanzapine 5 mg/day was added to the treatment.

Case 2: The 57-year-old widowed female patient with BD diagnosis, who had been on follow up for 27-years consulted with complaints of depression. Lithium (900 mg/day) was added to her ongoing treatment with valproate (1000 mg/day), bupropion (150 mg/day) and clozapine (25 mg/day). During follow up controls bupropion was increased to 300 mg/day and lithium was decreased to 600 mg/day after determination of high level of lithium in her blood. When subsequently her symptoms recurred, the patient's treatment was reorganized with valproate (750 mg/day), lithium (600 mg/day) and aripiprazole (20 mg/day).

Both patients reported that their hair became curly from the follicle about one year after the first time lithium was added to their treatment. During the follow up controls, it was seen that both patients had developed distinctly curly hair, completely different from the natural structure. Lithium therapy was discontinued since neither patient had benefited from lithium and were exceedingly unhappy with curly hair. Within one year after discontinuation of lithium, the patients' hair returned to the original straight form starting from the follicles.

There are very few publications in the literature on the relationship between lithium use and hair deformation. In a study (McCreadie et al. 1985) evaluating lithium side effects on 99 patients indicated that 19% of patients suffered from hair thinning and 23% complained of changes in hair texture, primarily with decreasing hair wave and curl in contrast to increased curling as reported here. Comparison of the lithium levels in hair samples of patients with and without changes in hair structure demonstrated higher lithium levels in patients with changed hair texture.

In the two cases reported here, significant curling of their hair made the patients feel uncomfortable enough to stop their treatments. After discontinuation of lithium use, the patients' hair returned to their natural forms. Hair turning curly may be associated with lithium use, since both cases did not have a medical condition to explain the change in hair except lithium use and the hair structure returned to the natural forms after discontinuation of lithium intake. The Adverse Drug Reaction Probability Scale developed by Naranjo et al. is an algorithm consisting of 10 questions evaluating whether side effects are drug dependent or not. Scoring nine points and above indicate a definite relationship between the drug and the adverse reaction, while 5-8 points correspond to probability and 1-4 points only the possibility of a relationship (Naranjo et al. 1981). The relationship between lithium and the occurrence of hair turning curly was evaluated as a probable side effect on the basis of 5 points. This report on two cases is the first to associate lithium usage with development of curliness in the texture of the hair.

The purpose of our letter is to point out that during lithium use, besides the wide range of known side effects, different and rare side effects such as hair curl may also occur. Therefore, when clinicians encounter a condition such as hair curl during lithium use, they should consider that it may be related to lithium before linking it to another reason.

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