

# Case Report

## Successful Use of Add - On Topiramate for Antipsychotic - Induced Weight Gain

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### ABSTRACT

Antipsychotic induced weight gain is the most common and distressing side effect. This also affects the compliance toward the treatment and hence the prognosis. Non - pharmacological interventions such as exercise and diet modifications alone might not be sufficient most of the times; also ensuring compliance toward this is difficult in patients with psychiatric illness. So, the role of weight - reducing drugs become important. In this case report, we describe the use of low - dose topiramate as a weight - reducing agent, in a patient with a bipolar affective disorder - mania with psychotic symptoms, who had significant risperidone - induced weight gain.

**Key words:** Antipsychotics, bipolar affective disorder, topiramate, weight gain

### INTRODUCTION


Weight gain is one of the commonest and most distressing side effects of antipsychotics that can add to the morbidity and mortality of the disease being treated. Weight gain can be counteracted through pharmacological and non - pharmacological interventions. Pharmacological management includes use of weight - reducing drugs.<sup>[1]</sup> Topiramate is one of the weight - reducing agents that has been used successfully in reducing antipsychotic - induced weight gain. Topiramate has been reported to reduce body weight in patients treated for seizures, bipolar disorder, schizophrenia, and binge - eating disorders with obesity.<sup>[2-5]</sup> Studies have reported a significant body

weight reduction with doses of topiramate ranging from 100 to 300 mg/day.<sup>[3]</sup> In this case report, we describe a patient of bipolar affective disorder (BPAD) mania with psychotic symptoms who showed a significant body weight reduction with very low dose of topiramate.

### CASE REPORT

Ms C an 18-year-old woman, congenitally deaf and mute, educated up to high school, a case of BPAD mania with psychotic symptoms (International Classification of Diseases - 10) in remission, presented to us with a significant weight gain while on treatment with 6 mg/day of risperidone, 200 mg/day of chlorpromazine, and 4 mg/day of trihexyphenidyl. Her parents complained of a significant weight gain of 18 kg over a span of 5 months. Then she was started on 25 mg/day of topiramate with a gradual increase in dose to 50 mg/day over 1 week. At the same time, chlorpromazine was withdrawn.

After 2 weeks of starting topiramate, her parents noticed reduction in her appetite. Within 1 month she had lost 2 kg. During this course, she also complained of

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amenorrhea, for which she was evaluated with serum prolactin levels and ultrasound abdomen. Her serum prolactin levels were elevated (48.3 ng/ml), and her ovaries showed features suggestive of polycystic ovarian disease (PCOD). She was started on 10 mg/day of aripiprazole. During her next follow – up, i.e., after 2 months, she showed a weight loss of 3 kg. This time she was planned to gradually reduce risperidone dose while continuing other medications (risperidone was gradually reduced and finally stopped over a period of 12 months). She was continuously monitored for weight and body mass index measurements. She showed a gradual decline in weight at a rate of 2 - 3 kg every 2 months. After 15 months of treatment with topiramate, she had lost nearly 18 kg, and had reached near pre-morbid weight without any adverse effects. Only pharmacological interventions were done, and no lifestyle or diet modifications were practiced inspite of repeated advice. Her serum prolactin levels also reduced gradually (33.07 ng/ml) after 6 months of starting aripiprazole along with regularization of menstrual cycles.

## DISCUSSION

This case report suggests the usefulness of topiramate as an adjuvant in reversing the weight gain caused by antipsychotics. In this case scenario, aripiprazole, an atypical antipsychotic with additional weight - reducing property,<sup>[6]</sup> might appear to have contributed to the weight loss,; but the clinical course clearly indicates the onset of weight loss even before the start of aripiprazole. It also raises the question of whether withdrawal of chlorpromazine contributed to the weight loss. But there was no increase in appetite when she was on chlorpromazine and her appetite decreased after adding topiramate. Topiramate, in addition to its weight - reducing property, also has mood - stabilizing properties,

which can be an added benefit in the management of mood disorders.<sup>[7]</sup> To summarize, our observation reports a significant weight loss with a very low dose of topiramate, i.e., 25 - 50 mg/day, in contrast to other studies.<sup>[3]</sup> Hence we conclude that topiramate can be used as a potential weight - reducing agent in patients on antipsychotics with significant weight gain.

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