

# Fluoxetine Induced Hypomanic Shift in a Bulimic Patient: Case Report

Mustafa Ozten<sup>1</sup>, Atıla Erol<sup>1</sup>

## ÖZET:

Fluoksetin ile hipomanik kayma gelişen bulimik bir hasta: Olgu sunumu

Fluoksetinin mizaç ve anksiyete bozukluklarında anti-depresan dozlarda kullanımıyla manik veya hipomanik kaymaya neden olabildiği bilinmektedir. Bulimiya Nervosa (BN)'nin farmakolojik tedavisinde antidepresan etki için kullanılan dozlardan daha yüksek dozlarda fluoksetin kullanılması gerekmektedir. Yüksek doz fluoksetin kullanıldığında manik veya hipomanik kaymaların görülme ihtimali artmaktadır. Mizaç bozukluğu ek hastalığı varlığında BN'nin fluoksetinle tedavisi manik kayma açısından daha riskli hale gelmektedir. Bipolar bozukluk öyküsü olmayan ve aile öyküsünde de bipolarite saptanmayan BN hastasında 60 mg fluoksetin kullanımı sırasında hipomanik kayma gelişmiştir. BN hastalarında antidepresan ilaç kullanımı, manik kayma riski ve komorbid mizaç bozukluğunun tedaviye direnç oluşturabilmesi vaka bağlamında tartışılmıştır.

**Anahtar sözcükler:** Bulimiya nervosa, fluoksetin, manik/hipomanik kayma

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## ABSTRACT:

Fluoxetine induced hypomanic shift in a bulimic patient: case report

Use of antidepressant doses of fluoxetine for mood and anxiety disorders is known to cause manic or hypomanic shifts. Fluoxetine should be used at higher doses for pharmacological treatment of bulimia nervosa (BN) than those used for an antidepressant effect. High doses of fluoxetine increase the possibility of manic or hypomanic shifts. In cases of comorbidity of BN and mood disorder, fluoxetine treatment is becomes more risky in terms of the occurrence of a manic shift. During the use of fluoxetine 60 mg by a patient with BN, who had no history of bipolar disorder or family history of bipolarity, a hypomanic shift occurred. A BN patient being treated with an antidepressant, who experienced a manic shift risk and comorbid mood disorder which may cause resistance to treatment, are discussed in this case.

**Key words:** Bulimia nervosa, fluoxetine, manic/hipomanic shift

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<sup>1</sup>Sakarya University Training and Research Hospital, Department of Psychiatry, Sakarya-Turkey

Yazışma Adresi / Correspondence Address: Mustafa Ozten, Sakarya University Training and Research Hospital, Department of Psychiatry, Sakarya-Turkey

Elektronik posta adresi / E-mail address: drozten@gmail.com

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## INTRODUCTION

It has been shown that antidepressants are effective in the pharmacological treatment of bulimia nervosa (BN) (1). Among antidepressants, fluoxetine is used in BN (60 mg/day) at higher doses than its antidepressant doses as has been approved by FDA and it gives better results (2). It is known that manic or hypomanic shifts occur during antidepressant treatment. It is also known that fluoxetine might cause manic or hypomanic shifts when it is used at antidepressant doses in mood and anxiety disorders (3-7). Since it is required to use fluoxetine at higher doses in the treatment of BN for

its anti bulimic effect, it is necessary to be more vigilant in terms of the risk of manic or hypomanic shifts. In addition, those who have bipolar mood disorder or a family history of bipolar mood disorder, have a higher risk of manic or hypomanic shifts during treatment with fluoxetine (3,4,7).

Since mood and anxiety disorders are significantly encountered as comorbid diseases in eating disorders (8,9,10), it is necessary to pay special attention to the existence of comorbid diseases during drug selection. In eating disorders, the state of comorbid diseases not only causes an increase in general social harmony problems and a decrease in response to treatment, but also increases the severity and chronicity of the

existing ED (11-12). There is no available treatment algorithm that is suggested to be used for bipolar mood disorder and comorbid BN. It is recommended to use drugs that have a positive effect on both disorders theoretically; however, there is no such a drug. The fact that mood stabilizers have a weight-gaining effect and that the use of antidepressants is associated with manic shifts, challenges clinicians in terms of drug selection. A BN patient, who developed a hypomanic episode after the use of fluoxetine 60 mg, will be discussed in this case.

## CASE

V.O. was a 21 year-old unemployed woman, who received her education in an open high school and lived with her father. During the assessment, she complained about making herself vomit using a finger after meals due to fear of overeating and gaining weight. Her height was 1.79 m, weight was 90 kg and body mass index was 28.09; her mood was euthymic. The patient started to make herself vomit using a finger due to binge episodes that had been caused by the death of her mother as a result of a heart attack 3 years before and fear of gaining weight after each binge. There was no history of drug use and exercise to avoid gaining weight. During the period when the complaints emerged, the patient weighed 80 kg and had a body mass index of 24.96. This situation continued for approximately 1.5 years. Fluoxetine was started and gradually increased to 60 mg/day for the patient, who attended our clinic after 1.5 years. Using drugs regularly for 2 months, the patient had decreasing levels of vomiting by finger and overeating. By the 3rd month of treatment the patient, who was full of energy despite insufficient sleep, had logorrhoea, thought that she could achieve anything, had an excessive self-confidence and oniomania, and suddenly married her friend, whom she had met 3 months before. The hypomanic attack was suppressed in the patient, whose fluoxetine was discontinued, with the help of a combination treatment of lithium and quetiapine. No bipolar mood disorder and unipolar depression were diagnosed in the patient or in her family history.

## DISCUSSION

The effect of antidepressants from almost all groups on decreasing the symptoms of BN and binge has been noted (13). However, the only drug with FDA approval for treatment of BN is fluoxetine. The effective dose of fluoxetine for BN treatment is higher than its antidepressant dose (2). It is known that the use of antidepressants causes manic or hypomanic shifts. In the meta-analysis that was conducted by Tondo and colleagues, 114,521 patients were examined in 109 studies; it was found that while the mania risk for those who received antidepressant treatment was 12.5% and for those who did not receive such treatment was 7.5%, the risk associated with tricyclic antidepressants was higher, compared to SSRIs (14). Even though the risk of SSRIs to cause manic or hypomanic shifts seems to be lower than tricyclics, hypomanic or manic shifts have been reported in the literature with the use of fluoxetine in mood and anxiety disorders (Settle 1984, Lebegne 1987, Nakra et al 1989). Detailed analysis of these cases involves the existence of mood disorder in the family history (Lebegne 1987), and history of affective disease in the past (Settle 1984, Lebegne 1987, Nakra et al 1989). In the study conducted by David Goldstein and colleagues (1995), it was observed that fluoxetine at a dose of 60 mg/day was more effective than placebo in 225 cases of bulimia nervosa; it was safe for approximately 16 weeks, and neither manic nor hypomanic shifts were encountered. In the study conducted by Steven Romano and colleagues (2002), fluoxetine treatment was given to 232 bulimic cases at a dose of 60 mg/day for 1 year; it was observed that 60 mg/day fluoxetine decreased the risk of relapse and neither manic nor hypomanic shifts were encountered in any case.

Even though fluoxetine is used at a higher strength in the treatment of BN compared to its antidepressant dose, there is no reported case of manic or hypomanic shifts in the literature. Regarding BN and binge-eating disorder cases, that had no observed bipolar mood disorder in the past, two cases have been reported, which had a manic transition after the use of an antidepressant. In the BN case (Siegel 1989), a

15-year-old female, who was treated with 125 mg/day imipramine developed a manic shift on the 9th day; the hospitalized patient was given lithium, chlorpromazine, and haloperidol treatment, recovered and was discharged after 2.5 months.

In BN cases, mood disorder was reported at rates between 75% and 52% (13). In a study that was conducted with 59 young women with BN, Brewerton and colleagues (15) observed mood disorder in 75% and major depression in 63% of the recruited population. In ED, great variations were recorded in lifelong rates of bipolar mood disorder; however, considering the mean of the determined rates, the rates of bipolar mood disorder are higher in patients with ED compared to the general population (13). In addition, considering the possibility of antidepressants causing manic or hypomanic shifts, the use of high-dose antidepressants increases the risk considerably.

Comorbid psychiatric disease not only increases the severity and chronicity of the eating disorder, but also obstructs its treatment (8,12). In this case, a hypomanic episode was experienced by a BN patient, who had neither bipolar disorder history nor bipolarity in the family history, in the 8th week of the treatment due to the use of 60 mg/day fluoxetine.

Examining the treatment, it was determined that the expected response could not be seen with fluoxetine treatment at a dose of 60 mg/day and no explicit regression was observed in symptoms. Evaluating retrospectively, the reason for lack of a significant response to treatment was associated with the existence of comorbid bipolar mood disorder. Even though manic or hypomanic shifts during treatment with fluoxetine, such as in our case, are a frequently-encountered issue in the literature, care is required while using fluoxetine in BN patients regarding manic or hypomanic shifts since there is no study that examines the phenomenon of manic or hypomanic shift during the use of fluoxetine in BN treatment. Indeed, there is no reported case that shows that not only the expected clinical effects but also the side effects serve as determinants in the drug selection, because there is no treatment algorithm to be followed in comorbid bipolar or ED cases. In patients with ED, the comorbid disease of bipolar mood disorder might cause lack of response to treatment, or the antidepressant used might result in manic or hypomanic shifts. There is a need for studies on drug activity in BN, in terms of both side effects and comorbid diseases.

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