A rare adverse drug reaction to escitalopram

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ABSTRACT

Selective serotonin reuptake inhibitors are considered to be low side effect profile drugs as compared to conventional antidepressants. The primary care physicians should be aware of the rare and depressing side effect of these drugs when they are prescribed in young, nonpregnant females. Mastalgia has been reported in <1% of the cases. Galactorrhea as an adverse drug reaction has been reported in very few case reports, and the frequency of this side effect is unknown.

Keywords: Antidepressants, euprolactinemia, mastalgia, side effect

Introduction

Selective serotonin reuptake inhibitors (SSRIs) are being preferred over the conventional antidepressant drugs due to their low side effect profile and effectiveness. However, the clinicians should be aware of rare adverse drug reaction of this drug which can make its use cautious in young females. The case report takes into consideration one of the rare side effects of escitalopram. The case report aims to make primary care physician aware of this and factors that should be considered before prescribing escitalopram to young nonpregnant women. While mastalgia has been reported in <1% of cases, the risk of reporting of hyperprolactinemia with the use of antidepressants has been reporting odds ratio (ROR, of 3.3; 95% confidence interval [CI] 2.8, 3.8) with escitalopram being ROR (3.9; 95% CI 2.6, 5.8). However, the frequency of galactorrhea has only been reported in isolated case reports.[1]

Case Report

A 24-year-old single, college student was diagnosed with cervical lymph node tuberculosis. She was started on antitubercular treatment on a daily basis. One month after taking anti-tuberculosis treatment (ATT). She had a history of depressive symptoms occurring episodically. She continuously had a depressed mood with a feeling of hopelessness. She told that she felt sad about the disease and felt that her life was worthless now. A diagnosis of depressive disorder was made as per her symptoms. She was started on tablet escitalopram 10 mg a day, which she had continued to take. For 1 month of starting escitalopram, she noticed pain and swelling in both of her breasts along with a white, milky discharge. She was not pregnant at the time, and she had no other physical symptoms. There was no history of a headache or visual blurring. She was progressively having mastalgia and the milky discharge was gradually increasing.

There was no history of the similar problem there was no family history of breast disease, pituitary diseases and galactorrhea. Her menstrual cycles were regular, and there was no history of menorrhagia. She was on antituberculous drugs. On physical examination, she was conscious oriented. General examination findings were normal. Physical examination revealed engorged non-tender breasts with whitish discharge on applying pressure. Visual field was normal. Systemic examination was normal. Laboratory investigations revealed normal hematocrit and thyroid profile. Serum prolactin levels were estimated which was normal. Imaging studies like magnetic resonance imaging brain...
were done to rule out pituitary involvement, which was found out to be normal.

Since there was a temporal association between the pain, heaviness, and milky discharge from the breasts and medicines (ATT and escitalopram), the same was assumed to be the causative agent. After contemplating the risk and benefits of stopping ATT, it was decided to stop escitalopram first and if there is no response then think of stopping ATT one by one to find the causative agent, and hence that by that time she would have entered the continuation phase of ATT. Escitalopram was stopped, and over the next 3 months, she received trials of venlafaxine with some improvement in depressive symptoms. Galactorrhea and breast discomfort gradually resolved.

**Discussion**

With the increase in the use of SSRI certain uncommon side effects of these drugs come to light. In our case, patient suffers from euprolactinemic galactorrhea due to escitalopram but at a very low dose of 10 mg/day. The cause of this side effect is still not well understood and appears to have a number of probable explanations. The literature suggests that there is a significant temporal correlation of external events with the onset or worsening of galactorrhea. Galactorrhea results from the interaction of pharmacologic, endocrinologic, and psychogenic factors. One probable explanation for SSRI induced galactorrhea is an increase in prolactin levels due to serotonin (5-HT)-mediated inhibition of the tuberoinfundibular dopaminergic neurons or direct stimulation of prolactin release through the postsynaptic 5-HT receptors in the hypothalamus. As prolactin level in the patient is well within normal limits, this fails to explain the galactorrhea in this case. Hence, there has to be another mechanism for this effect. Moreover, the patient did not complain of a similar problem with venlafaxine which also caused a similar effect in some patient. This points toward a novel mechanism of antidepressant-induced galactorrhea rather than a dopamine-prolactin interaction.

Such situations can be managed either by waiting for this effect to resolve by itself with time while continuing with the same dose or changing to other medicines less likely to cause hyperprolactinemia such as dothiepin, nefazodone and bupropion. Clinicians should always rule out antidepressants as a cause of galactorrhea, once the organic lesions have been excluded from the study. The age of the patient, gender of the patient, and knowledge of rare adverse drug reactions go a long way in aiding the primary care physicians to identify them at the earliest and prevent the psychosocial suffering of the patient. The mechanism of this effect is multifactorial and not completely understood, so more extensive research is required for explanation of this side effect.

**Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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**Conflicts of interest**

There are no conflicts of interest.

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