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GALACTORRHEA INDUCED BY PAROXETINE. A CASE REPORT AND REVIEW OF LITERATURE

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ABSTRACT
Galactorrhea has been reported with agents such as antidopaminergic antiemetics, antipsychotics, etc., there are few case reports of galactorrhea with selective serotonin reuptake inhibitors, including paroxetine. We here report a case of paroxetine induced galactorrhea in a 18 year‑old female patient of panic disorder, having hyperprolactinemia.

INTRODUCTION

Anxiety and depression are the common psychiatric disorders in our society. The various antideprssants are used for their treatment and among them selective serotonin reuptake inhibitors are commonly used class of drugs. The members of this class share several features including therapeutic indications, adverse effects etc. at varying degrees. SSRIs have many side effects which includes, gastrointestinal upsets, sexual dysfunction, and among SSRIs withdrawal reaction in the form of akathesia, dizziness and restlessness upon sudden discontinuation are the common side effects of paroxetine. Paroxetine is commonly used for conditions like panic disorder, social and specific phobias post-traumatic stress disorder etc [1]. Galactorrhoea is a rare adverse effect with the use of SSRIs as compared to other antidepressants [2]. Among the SSRIs this adverse effect has been seen rarely with the use of paroxetine. We hereby report a case of paroxetine induced Galactorrhea in a non-pregnant un-married female.

Case Presentation

18 - year- old unmarried female came to the psychiatric out-patient department with complaints of palpitations, breathlessness, shivering, fatigability, sweating, fear of impending doom and irritability for the last 3 months. Initially symptoms were not causing any distress to the patient, but later on the severity of symptoms mentioned above increased and patients felt extremely distressed and panicky in crowded places. She avoided attending social gatherings and other activities. She always feared to have symptoms in between episodes. These symptoms were episodic as she had 1-2 episodes/day and the duration of each episode was 10-15 minutes. There was no precipitating factor according to the patient. Detailed history was taken. Patient had no past psychiatric of medical history, her family history been positive for depression in her sister, but there was no family history of any gynaecological, neurological and endocrinological disorders. Clinical examination including general and systemic was done and were found to be normal. The routine baseline investigation including CBC, blood sugar, urea, creatinine, liver function test, thyroid profile were within limits. A provisional diagnosis of panic disorder with agoraphobia was made in accordance to criteria led down in Diagnostic and statistical manual of mental disorders (DSM IV TR). She was prescribed

12.5mg/day paroxetine for 1 week with the dose being increased to 25 mg/day after two weeks of the initiation of treatment. The patient showed significant improvement in above mentioned symptoms. She continued the treatment for 6 months. After which she noticed milk secretion from both her nipples. Her menstrual cycles were regular and normal. Initially patient did not reveal to anybody about this secretion. Then the patient went to a gynaecologist who did a detailed clinical examination which revealed galactorrhea. There was no history of any bloody, greenish or foul-smelling discharge from nipples.

Then the most likely causes of galactorrhea including hypothyroidism, prolactinoma, liver cirrhosis, renal failure, pregnancy and oral-contrceptives were ruled out. Investigations which include blood chemistry, the thyroid function tests and beta human chorionic gonadotropin were normal. The serum prolactin level was found to be 88.91 ng/ml (normal levels being 6 to 29.9 ng/ml). Breast ultrasonography, Magnetic resonance imaging of the hypothalamic/pituitary area, & serum FSH, DHEAS and estradiol levels were normal. Thereafter, the patient was referred to endocrinologist in view of high prolactin levels and patient's reporting of symptoms suggestive of galactorrhea was related to treatment with paroxetine, because her galactorrhea developed after increasing the paroxetine dosage to 25 mg/day, and all other possible causes were ruled out and considering above reports paroxetine was assumed to be responsible for the galactorrhoea and diagnosis of "drug-induced hyperprolactinemia" was made. Then the dosage of paroxetine was tapered and then stopped completely. The discharge stopped completely within 2 weeks after stopping paroxetine. The prolactin level was found reduced to normal 10.15 ng/ml (normal levels being 6 to 29.9 ng/ml).

DISCUSSION

Galactorrhea is defined as abnormal discharge of milk or milk like secretions from the breast in the absence of pregnancy. Galactorrhea is due to an inappropriate release of prolactin in most patients. In some cases it may be due to presynaptic inhibition of dopamine discharge by serotonergic receptors while in some cases it may be due to direct stimulation of hypothalamic postsynaptic serotonergic receptors [2,3].

Galactorrhoea may or may not be associated with Hyperprolactinemia. It is very important to rule out certain conditions namely pituitary tumors, hypothyroidism, excessive estrogen intake, stress or hypothalamic lesions, liver and renal failure, some medications like antidopaminergic, antipsychotic drugs etc. Galactorrhea with normal serum prolactin levels have been reported with approximately 30% of the patients [4].

Galactorrhoea associated with the use of antidepressant has been reported as early as in 1964 after the introduction the imipramine [5]. Since then several case reports have been published implicating variety of antidepressants drugs including amitriptyline[6], amoxapine [7,8] clomipramine [9,10], maprotiline [11], dothiepin [12], fluvoxamine [13,14], fluoxetine [15,16] sertraline [17], and among ssris paroxetine has been associated with galactorrhoea in several cases[18,19].The published literature has not been conclusive about the mechanism/s of this effect. In this article, we present the case of a 18-year old female who was treated with paroxetine for her panic disorder with agoraphobia and developed galactorrhea with hyperprolactinemia that resolved upon discontinuation of the drug.

The case under discussion highlights certain clinically relevant points that have been observed by some researchers earlier [20].The time duration on treatment of six months, dosage of 25mg/day and cessation of galactorrhoea after withdrawal of paroxetine. Although, systemic research into this phenomenon is deficient at the present stage, however this case report should be serve to remind the clinicians of the possibility of occurrence of this less commonly seen adverse effect which can be especially embarrassing for young unmarried female in our culture. Whether or not associated with increased serum prolactin levels, the presence of galactorrhoea needs proper evaluation to exclude any underlying condition/s mentioned earlier. Alongside, through work up the clinicians should withdraw the medication in question and make appropriate substitution with another anti-depressant.

CONCLUSION

In conclusion, our case report provides additional information about the existence of a relationship between the use of paroxetine and the occurrence of galactorrhoea as an adverse effect though rarely seen. This adverse effect is very embarrassing for Young non pregnant females but usually not harmful. It is very important for the clinicians to investigate and rule out other causes of galactorrhoera and to be aware of this unusual side-effect of paroxetine. Stoppage of the drug usually results in the subsidence of galactorrhoea.

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CONFLICT OF INTEREST: None

STATEMENT OF HUMAN AND ANIMAL RIGHTS

All procedures performed in human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.

REFERENCES

1. Cascade E, kalai AH, Kennedy SH. (2009). Real-World Data on SSRI Antidepressant Side Effects, psychiatrty (Edmont) 6, 16-8.
2. Egberts AC, Meyboom RH, De Koning FH, Bakker A, Leufkens HG. (2997). Non-puerperal lactation associated with antidepressant drug use. *Br J Clin Pharmacol*, 44(3), 277-81.
3. Bronzo MR, Stahl SM. (1993). Galactorrhea induced by sertraline. *Am J Psychiatry*, 150(8), 1269-70.
4. Kaye TB. (1993). Hyperprolactinemia. Causes, consequences, and treatment options. *Postgrad Med*, 99(5), 265-8.
5. Klein JJ, Segal RL, Warner RR. (1964) Galactorrhea due to 20 Meyboom RH, Assies J, Bemt PM van den, de Koning GHP. imipramine. *N Engl J Med*, 27**(**1), 510–512.
6. Rees WD. (1993). Lactation and ovarian cyst formation following *Tijdschr Geneeskd*, 137, 2498–2503.
7. Gelenberg AJ, Cooper DS, Doller JC, Maloof F. (1975). Galactorrhea lactation. *Clin Obstet Gynecol*, 18, 65–93. and hyperprolactinemia associated with amoxapine therapy. Report of a case. *JAMA*, 1979, 242, 1900–1901
8. Jaffe K, Zisook S. (1978). Galactorrhea in patients with amoxipine. *J Clin psychiatry*, 39, 821.
9. Fowlie S, Burton J. (1987) Hyperprolactinaemia and nonpuerperal lactation associated with clomipramine. *Scot Med J*, 32, 52.
10. Anand VS. (1985). Clomipramine—induced galactorrhoea and amenorrhoea. *Br J Psychiatry*, 147, 87–88.
11. Perez OE, Henriquez N. (1983). Galactorrhea associated with maprotiline. *Am J Psychiatry*, 140, 641–642
12. Gadd EM, Norris CM, Beeley L. (1987). Antidepressants and galactorrhoea. *Int Clin Psychopharmacol*, 2, 361–363.
13. Jeffries J, Bezchlibnyk-Butler K, Remington G. (1992). Amenorrhea and galactorrhea associated with fluvoxamine in a loxapine- treated patient. *J Clin Psychopharmacol*, 12, 296–297.
14. Bonin B, Vandel P, Sechter D, Bizouard P. (1997) Paroxetine and galactorrhea. Pharmacopsychiatry, 30(4), 133-4.
15. Iancu I, Ratzoni G, Weitzman A, Apter A. (1992). More fluoxetine experience. *J Am Acad Child Adolesc Psychiatry*, 31, 755–756.
16. Arya DK, Taylor WS. (1995). Lactation associated with fluoxetine treatment. *Aust NZJ Psychiatry*, 29, 697.
17. Lesaca TG. (1996). Sertraline and galactorrhea. *J Clin Psychopharmacol*, 16, 333–334.
18. Morrison J, Remick RA, Leung M, Wrixon KJ, Bebb RA. . (2001) Galactorrhea induced by paroxetine. *Can J Psychiatry*, 46(1), 88-9.
19. González E, Minguez L, Sanguino RM. . (2000) Galactorrhea after paroxetine treatment. *Pharmacopsychiatry*, 33(3), 118.
20. Antoine C. G. Egberts, Ronald H. B. Meyboom, Fred H. P. De Koning, Albert Bakker & Hubert G. M. Leufkens. (1997). Non-puerperal lactation associated with antidepressant drug use. *Br J Clin Pharmacol*, 44, 277–281.