DOI: 10.5455/bcp.20120812015108

High Dose Paroxetine-Induced Galactorrhea with Normal Serum Prolactin Level: A case report

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ÖZET:

Yüksek doz paroksetinin yol açtığı normal serum prolaktin düzeyli galaktore

Daha öncesinde belirgin bir psikiyatrik öyküsü olmayan 33 yaşında kadın hastada zaman içinde kötüleşen depresyon ve anksiyete belirtilerinin ortaya çıktığı öğrenildi. Depresif duygu durum, günlük ev işlerine yönelik ilgi kaybı, uyku ve iştahta azalma, çabuk yorulma ve irritabilitesi vardı. Depresif bozukluk öntanısı konarak 20 mg/gün paroksetin tedavisi başlanarak, üçüncü kez ayaktan polikliniğe başvurduğunda tedavi dozu 60 mg/güne yükseltildi. İki hafta sonra her iki memesinden süt salgısı geldiği öğrenildi. Kan biokimyası, tiroid fonksiyon testleri ve beta insan koryonik gonadotropini düzeylerinde anormal bulgu yoktu. Hipotalamik/hipofizer alana yönelik magnetik rezonans görüntülemesi normal bulundu. Serum prolaktin, FSH, DHEAS ve östradiol düzeyleri normal bulundu. Galaktore paroksetin dozunun 60 mg/güne yükseltilmesinden sonra başladığı için, dozu haftada 10 mg azalttık. Otuz mg/gün paroksetin düzeyine ulaşıldığında süt salgısı kesildi. Paroksetin doz artışı ile galaktorenin başlangıcı ve ilaç dozunun azaltılması ile galaktorenin düzelmesi arasındaki zamansal ilişki, ilaca ait olası etyolojik bir rolün varlığını akla getirmektedir.

Anahtar sözcükler: Galaktore, prolaktin, paroksetin

Klinik Psikofarmakoloji Bülteni 2012;22(4):355-6

ABSTRACT:

High dose paroxetine-induced galactorrhea with normal serum prolactin level: a case report

A 33-year-old woman with no significant psychiatric history began to have depressive and anxiety symptoms that worsened over time. She had depressed mood, loss of interest in her daily household works, reduced sleep and appetite, fatigability and irritability. A provisional diagnosis of depressive disorder was made and she was prescribed 20 mg/day paroxetine with the dose being increased to 60 mg/day at her third outpatient psychiatric appointment. After 2 weeks she noticed milk secretion from both her nipples. There were no abnormalities in blood chemistry, thyroid function tests and beta human chorionic gonadotropin. Magnetic resonance imaging of the hypothalamic/pituitary area was normal. The serum prolactin, FSH, DHEAS and estradiol levels were normal.

Because her galactorrhea developed after increasing the paroxetine dosage to 60 mg/day, we reduced the dosage by 10 mg per week. The discharge stopped when we reached a dosage of 30 mg/day paroxetine. The temporal relationship between the paroxetine dose increase and the onset of galactorrhea and between the drug dose decrease and the remission of galactorrhea suggests a possible etiologic role for this drug.

Key words: Galactorrhea, prolactin, paroxetine

Bulletin of Clinical Psychopharmacology 2012;22(4):355-6

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Gönderme tarihi / Date of submission: 20 Temmuz 2012 / July 20, 2012

Kabul tarihi / Date of acceptance: 12 Ağustos 2012 / August 12, 2012

Bağıntı beyanı:
S.S., B.B., O.K.: Yazarlar bu makale ile ilgili olarak herhangi bir çıkar çatışması bildirmemişlerdir.

Declaration of interest:
S.S., B.B., O.K.: The authors reported no conflict of interest related to this article.

INTRODUCTION

Galactorrhea is defined as discharge of milk or milk-like secretions from the breast in the absence of pregnancy or beyond 6 months post-partum. In most pathophysiological states, the final pathway leading to galactorrhea is an inappropriate release of prolactin. Two mechanisms have been considered to explain prolactin release induced by the serotonergic system: presynaptic inhibition of dopamine discharge by serotonergic receptors or direct stimulation of hypothalamic postsynaptic serotonergic receptors (1,2).

Hyperprolactinemia may be due to pituitary tumors, drugs that inhibit hypothalamic dopamine, hypothyroidism, excessive estrogen intake, stress or hypothalamic lesions. According to some researchers approximately 30% of the

patients presenting with galactorrhea may have normal serum prolactin levels (3).

Several classes of medications have been reported to be associated with galactorrhea. According to Egberts et al. (1997) in a total of 14439 suspected adverse drug reactions there were 38 (3 per 1,000) reports of galactorrhea. Fifteen cases were associated with SSRIs. Other medications associated with galactorrhea were antidopaminergic antiemetics, antipsychotic drugs, histamine H2-receptor blockers, oral contraceptives, progestagens, fenfluramine, captopril, co-trimoxazole, valproic acid, astemizole and acetazolamide (1).

Some researchers found that the risk in women using serotonergic antidepressants is eight times higher than in women using non-serotonergic antidepressants (1).

In this article, we present the case of a 33-year old woman who was treated with paroxetine for her major depressive disorder and developed galactorrhea without hyperprolactinemia that resolved upon discontinuation of the drug.

CASE

A 33-year-old woman with no significant psychiatric history began to have depressive and anxiety symptoms that worsened over time because of her marital problems. She had depressed mood, loss of interest in her daily household works, reduced sleep and appetite, fatigability and irritability. She had no history of endocrine or reproductive pathology and she had not taken any medical agents. A provisional diagnosis of depressive disorder was made and she was prescribed 20 mg/day paroxetine with the dose being increased to 60 mg/day at her third outpatient psychiatric appointment 6 months her first visit because of her irregular applications. After 2 weeks she noticed milk secretion from both her nipples. She did not complained of any bloody, greenish or foul-smelling discharge. She consulted her gynecologist. Clinical examination revealed galactorrhea and shortening of menstrual bleeding with regular cycle at the last two cycle. She had a 8-year old boy whom she breastfed for up to two years. She was investigated to eliminate the most likely causes of galactorrhea. There were no abnormalities in blood chemistry, thyroid function tests and beta human chorionic gonadotropin. Breast ultrasonography revealed a fibroadenoma localized on the right nipple that was not related to the galactorrhoea. Magnetic resonance imaging of the hypothalamic/pituitary area was normal. The serum prolactin level was 15.8 ng/ml (normal levels being 6 to 29.9 ng/ml). The serum FSH, DHEAS and estradiol levels were normal.

Because her galactorrhea developed after increasing the paroxetine dosage to 60 mg/day, we reduced the dosage by 10 mg per week. The discharge stopped when we reached a dosage of 30 mg/day paroxetine.

DISCUSSION

There are several cases of paroxetine induced galactorrhea in the literature (4-6). According to our research the prolactin levels were in normal limits in only two cases (7,8). The relationship between galactorrhea and serum prolactin levels is not clear. The results of animal and human studies investigating the effects of individual antidepressants on plasma concentrations of prolactin are controversial, showing either normal or elevated levels (1). Hence more research is required to understand the true mechanism behind SSRI-induced galactorrhea.

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