

Switching to Fluoxetine in a Case of Sertraline-Induced Urinary Incontinence: A Case Report

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Date of receipt / Geliş tarihi: 1 Nisan 2012 / April 1, 2012

Date of acceptance / Kabul tarihi: 28 Mayıs 2012 / May 28, 2012

Dear Editor,

Urinary incontinence is involuntary leakage of urine. It is not life-threatening but does adversely affect the quality of life (1). On pathophysiology, activity of the detrusor muscle is decreased, urethral activity is increased. Because of reduced urethral output, urine accumulates in the bladder and after a certain point, overflow occurs (2).

Medications rarely cause urinary incontinence and mainly affect suburinary system. Although drug-induced urinary incontinence is noted as one of the side effects of selective serotonin reuptake inhibitors (SSRIs), there have only been few cases of SSRI-associated urinary incontinence in the literature (3).

We present a case report of urinary incontinence associated with sertraline use with possible underlying mechanisms that resolved when the patient discontinued sertraline and switched to fluoxetine.

A 38 year-old female, married patient with three children admitted to our outpatient psychiatric unit with depressive complaints. There was no history of any psychiatric or other medication. On her psychological examination, she replied questions briefly and properly. Her affect was depressive. The amount of speech was reduced. She had negative attitude about her past history. Her sleep and appetite

had decreased. She scored 22 on the Hamilton Depression Rating Scale (HDRS) on her first evaluation.

The patient was diagnosed with major depressive disorder according to DSM-IV criteria (4). Sertraline was started at a dosage of 50 mg/day and the patient was fully informed about the drug and its use. She was suggested to come to the outpatient clinic for follow-up after three weeks; however, she referred with complaint of urinary incontinence one week later. Without any feeling of pressure, she was experiencing urinary incontinence, which negatively affected her daily activities. The patient was consulted by an urologist and genitourinary causes and other factors that might cause the urinary incontinence were excluded. We concluded her urinary incontinence was due to the sertraline use, because it had appeared shortly after sertraline was initiated and especially, the patient had not experienced this problem before. Her medication was changed to 20 mg/day fluoxetine from 50 mg/day sertraline. Her urinary incontinence complaint disappeared two days later. On the following days, the patient did not have such complaints. Her HDRS score decreased to 12. Psychosocial functioning improved.

We presented a case report of urinary incontinence that developed after sertraline use. There are some case reports related with SSRI-induced enuresis on sertraline, paroxetine, and citalopram in the literature (5,6).

Despite extensive research, the mechanism of enuresis has not been clarified in detail. It is well established that acetylcholine, released from cholinergic nerves innervating the detrusor muscle, mediates the main part of voiding contraction (7).

In our case, α -adrenergic blockade by sertraline may partially explain urinary incontinence. In the literature, fluoxetine and sertraline have antienuretic properties due to their serotonergic effect on central presynaptic 5-HT_{1A} and peripheral 5-HT₃ receptors (8,9).

Sertraline has α -adrenergic blockade and dopamine reuptake inhibition properties and fluoxetine does not have any of these. In addition, fluoxetine has a 5-HT_{2C} agonist effect that sertraline does not. All these properties may explain why enuresis was observed on sertraline in this case (10). Adrenergic blockade may cause urinary incontinence via decreasing internal bladder sphincter tone, inhibition of dopamine reuptake can lead to incontinence by suppressing activity of the urethral sphincter.

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