

Escitalopram Related Erectile Dysfunction and Spontaneous Ejaculation during Micturition

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INTRODUCTION

Escitalopram is a novel selective serotonin reuptake inhibitor (SSRI) drug used for the treatment of depression (1). Sexual dysfunction is a common and troublesome side-effect associated with SSRIs and other classes of antidepressants (2). These side-effects have been considered to be a common reason for noncompliance which may lead to relapse and recurrence of depression (3).

A case of escitalopram related erectile dysfunction and spontaneous ejaculation during micturition in a patient with major depression are described.

Keywords: Escitalopram, erectile dysfunction, spontaneous ejaculation

CASE REPORT

A 43-year old man was brought to hospital by his family for depression. A screen for symptoms of major depression revealed that he had hopelessness, low energy, anhedonia, poor appetite, poor concentration, a strong sense of guilt and insomnia. He had become extremely withdrawn from his friends and had frequent thoughts of illness and death. He felt that the depression had developed relatively suddenly three months previously. However, he had been suffering from depression without any sexual dysfunction. Results of a general physical examination and laboratory investigation, including a thyroid function test, were normal. His psychiatric history did not include previous episodes of depression. We prescribed 10 mg escitalopram and alprazolam 1 mg daily. After 15 days, alprazolam was stopped, and at the end of week 3, escitalopram was increased to 20 mg daily. He reported partial erectile dysfunction impairing vaginal penetration which occurred at every coital relation attempt (2–3 times/week) after the fourth week of escitalopram treatment. Remission of this dysfunction was achieved at the 7th week of treatment with a Hamilton Depression Rating Scale (HAM-D) score of eight, but he complained of premature ejaculation occurring before the vaginal penetration at each

coital attempt, which he had never experienced before. He also reported a burning sensation at the end of micturition. Additionally, he described occasions of ejaculation while straining during micturition which was associated with a pleasurable sensation.

Escitalopram treatment was stopped and he was prescribed 100 mg fluvoxamine daily. After 15 days, fluvoxamine was increased to 200 mg daily. His erectile dysfunction and symptoms of spontaneous ejaculation subsided in three weeks. No additional medical or psychotherapeutic interventions were applied to treat these sexual problems. At the end of fourth week of fluvoxamine treatment, he was still euthymic with a HAM-D score of 6.

DISCUSSION

Erectile dysfunction and spontaneous ejaculation during micturition caused by escitalopram have not been reported before. Sexual dysfunction is a common and troublesome side-effect associated with SSRIs and other classes of antidepressants. Its occurrence frequently results in medication switching, discontinuation or dosage reductions to ineffective levels. Approximately 50 per cent of patients of both genders experience some degree of sexual dysfunction while taking SSRIs (2). Depressed male patients are almost twice as likely to present with erectile dysfunction compared with non-depressed men (4). However, the index case had been suffering from depression without any sexual dysfunction. Furthermore, patients treated with a SSRI may present with sexual dysfunction as an unwanted side effect of therapy. Paroxetine, sertraline and citalopram are reported to cause delayed ejaculation. A double-blind, randomized comparative study in 60 patients with premature ejaculation showed that placebo and fluvoxamine had no effect on the ejaculation time after six weeks of treatment, while paroxetine, fluoxetine and sertraline all significantly increased ejaculation latency; the greatest effect was seen with paroxetine (5). The SSRIs are reported to cause sexual dysfunction in the following descending order of frequency: paroxetine, fluoxetine, citalopram, sertraline and fluvoxamine (4). This is confirmed in part in a direct double-blind comparison between fluvoxamine and sertraline in which the incidence of abnormal ejaculation and decreased libido was significantly higher with sertraline than with fluvoxamine (6). According to a survey on how clinicians deal with the side-effects of

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SSRIs, 36% of psychiatrists prefer switching to another antidepressant to manage sexual dysfunction related to SSRIs (7). However, we preferred switching to fluvoxamine, another SSRI.

Serotonergic influences on sexual function are poorly understood. Selective serotonin reuptake inhibitors have been associated not only with impairment of sexual function but with restoration of sexual potency. The effects of serotonergic drugs on sexual function may relate to drug dose, serotonin receptor subtypes affected and the relative effect on serotonergic *versus* other receptors (8). Fluvoxamine (4, 5) appears less likely than other SSRIs to cause sexual dysfunction.

Noradrenalin is the major neurotransmitter involved in penile smooth muscle contractions (9). It increases corpus cavernosum smooth muscle tone *via* adrenoceptors (10) consequently decreasing the blood flow and inhibiting erection. Although the mechanism is not clear, we propose that escitalopram, by increasing noradrenergic activity, might increase smooth muscle tone in the corpus cavernosum which in turn might promote erectile dysfunction.

Ejaculation is regulated centrally by anterior hypothalamus and median forebrain bundles. It is facilitated by dopaminergic transmission and inhibited by 5HT1A antagonists and 5HT2 agonists (11). Escitalopram may have its effect on serotonergic receptor subtypes in these areas. Dopaminergic transmission may also play an important role in the pathogenesis of spontaneous ejaculation.

Clinical studies are warranted to evaluate the incidence of sexual side effects caused by escitalopram. However, sexual side-effects should be taken into consideration before prescribing an escitalopram treatment for depression,

because sexual dysfunction may play an important role in non-compliance with treatment and can act as an additional stress factor for the patient.

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