

Compulsive Voyeurism and Exhibitionism: A Clinical Response to Paroxetine

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The compulsive behaviors seen in sexual paraphilias may be related to those of obsessive-compulsive disorder (OCD). Based primarily upon case reports as well as studies indicating the effectiveness of serotonin reuptake inhibitors in the treatment of sexual paraphilias, it has been speculated that sexual paraphilias lie within the obsessive-compulsive spectrum. There have been no reports of the use of paroxetine in the treatment of sexual paraphilias. This is a report of two patients, the first a voyeur and the second an exhibitionist, both of whom responded to treatment with paroxetine. The discussion addresses the need for further comparative studies investigating the role of the serotonin system in the pathogenesis of sexual paraphilias and OCD as well as the effect of serotonin reuptake inhibitors in comparison to other pharmacologic modalities used in the treatment of paraphilias.

KEY WORDS: voyeurism; exhibitionism; paraphilias; obsessive-compulsive disorder; serotonin reuptake inhibitors.

INTRODUCTION

There has been an increased interest in the obsessive and compulsive nature of paraphilias and whether they lie within the obsessive-compulsive disorder (OCD) spectrum. The clinical response observed in patients with sexual paraphilias to selective serotonin reuptake inhibitors (SSRIs) has added to the hypothesis that sexual paraphilias could be a component of the OCD spectrum (Greenburg *et al.*, 1996; Kafka, 1994).

Redefining sexual paraphilias as a component of the obsessive-compulsive spectrum might encourage the further use of SSRIs by the average

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psychiatrist, who might find it less threatening than antiandrogens. This would result in a much larger role being played in the treatment of paraphilias. (Bradford, 1995). Two patients are presented: Patient A is a voyeurist and is divorced; Patient B is an exhibitionist and is married. Both patients had some college education by the time they presented and were working. Neither had any medical or neurological problems. They presented with recurrent and persistent thoughts and impulses to act in a voyeuristic and exhibitionistic fashion, respectively. These thoughts were sexually exciting, but were followed by a deep sense of shame and guilt. Both patients were successfully treated with paroxetine, and showed a decrease in the intensity and frequency of these thoughts as well as improved impulse control.

Fluoxetine (Greenburg *et al.*, 1996; Kafka and Prentky, 1992; Perilstein *et al.*, 1991), sertraline (Greenburg *et al.*, 1996; Kafka, 1994), fluoxamine (Greenburg *et al.*, 1996), and clomipramine (Clayton, 1993) have been used to treat sexual paraphilias. No reports of the use of paroxetine with paraphilias were found in the literature. Selective serotonin uptake inhibitors act by inhibition of serotonin reuptake in synaptic clefts, leading to increased serotonin in the cleft, followed by an increased transmission of serotonergic signals and a simultaneous reduction in the rate of firing of serotonin neurons as well as a decrease in the rate of synthesis and release of serotonin (Risch and Nemeroff, 1992).

CASE REPORT A

Mr. A, a 50-year-old divorced white male and the father of two, was self-referred for the evaluation and management of his voyeuristic behavior. He reported long-standing erotic compulsions to look up women's skirts using a mirror in public places. He did not remember the first time he did this, but remembers episodes during his teen years, involving his sisters. He also spent several hours a day watching naked women in pornographic movies while masturbating 4–7 times a day. He continued his erotic behavior during his early adulthood, describing feeling flushed and aroused by his voyeuristic behavior. He would then go home and masturbate. He states that throughout his marriage of 17 years, his wife had no knowledge of his behavior. He went home drunk one night and attempted to videotape his daughter in the shower. At the time of his presentation, he reported continued voyeuristic behavior in the manner described above. He noted a sense of relief of his urges afterwards, associated with frustration over his inability to control his behavior. He was also spending several hours a night on the Internet at pornographic websites. In the past, the patient was

tried on fluoxetine and paroxetine and noted a significant relief of his symptoms. He was started on 10 mg of paroxetine at bedtime. Four weeks later he reported an improvement in his ability to control his impulses, but continued to have the recurring thoughts, at which time his dose was increased to 20 mg at bedtime. There was a noticeable decrease in his voyeuristic behavior with a decrease in the frequency as well as a reduction in the intensity of his urges and thoughts. He decided to put a block on the pornographic Internet sites and is currently doing well, with no recurring incidents of voyeurism in 3 months of treatment. He then opted to discontinue his medication and continues to do well (for the past 4 months).

CASE REPORT B

Mr. B, a 29-year-old married white male, a father of two, was self-referred after an incident in which he exposed himself to a woman at his home that resulted in legal charges. He worked at a local branch of a cellular-telephone company and was a college graduate. He had no medical problems. The patient stated that his problems started at age 9 years when he was forced by his sister and her boyfriend to touch her genitals so as to make her have an orgasm. He recounted other episodes of physical abuse by his sister, who was 5 years older than he. At 14, he started having recurring compulsive thoughts of exposing himself to women. He described being sexually aroused when seeing a pretty woman, and would start planning how to lure her to a safe place and then expose himself to her.

On each of these occasions, the patient described being sexually excited prior to exposing, but then would have a deep sense of shame and guilt and would develop depressive symptoms. These incidents recurred until he was arrested and spent several months in jail. He was court-ordered to attend a sex offenders program, but that did not help. For the past 4 years he has had recurring thoughts of exposing himself, but had not acted on them until several months ago. He developed intense thoughts of exposing himself to a family friend and lured her into his bedroom and exposed himself. He was arrested and charged, but the woman was willing to drop the charges provided he sought treatment. He was started on paroxetine 10 mg at bedtime, and after 4 weeks, the patient reported a decrease in the recurrent thoughts and an ability to control the impulses to act. He described watching the "college girls" while he was at work, but was able to resist the impulse to expose himself. His paroxetine dose was increased to 20 mg at bedtime. Three weeks later he requested a dosage increase, due to thoughts of exposing himself to the daughter of his wife's

friend. He did not act on these thoughts. He continued to do well on 30 mg a day for 2¹/₂ months before being lost to follow-up.

DISCUSSION

Both patients reported obsessive ruminations and anticipatory anxiety (as well as sexual excitation) prior to acting out that were relieved after they acted out, which resembles the relief noted by patients with obsessive-compulsive disorders. They also acted in an impulsive manner (risk seeking) with little regard to avoiding harmful and often painful consequences of their acts.

Kafka (1994), hypothesized that paraphilic sexual fantasies (sexual obsessions) belong to the obsessive-compulsive spectrum of disorders and therefore would be improved by SSRIs. Greenburg and Bradford (1997), hypothesized that paraphilic disorders are disorders of aberrant (as opposed to conventional) sexual desire. Paraphilic acts are manifested when there is an inability to suppress these unconventional sexual appetites. Serotonin is known to play a role in sexual appetite. Hypothetically, SSRIs may therefore exert their therapeutic action by favorably altering the balance of a dysfunctional serotonergic system.

Another aspect of deviant sexual behavior that needs to be included in the attempt to correlate between sexual paraphilias and OCD is that of sexual addictions. Kafka (1991) defined nonparaphilic sexual addictions as culturally acceptable sexual interests and behaviors that increase in frequency or intensity so as to significantly interfere with the desired capacity for a sustained intimate sexual relationship. These behaviors may include compulsive masturbation, dependence on anonymous sexual outlets like pornography, or telephone sex, and repetitive promiscuity involving using people as sexual objects. He noted an improvement in both paraphilic and nonparaphilic symptoms in six out of seven patients treated with fluoxetine, and suggested that the behaviors can be conceptualized as a sexual dysregulation that has two dimensions: an increase or intensification of non-conventional sexual interest (nonparaphilic sexual addiction or paraphilias) and an increase in sexual desire. This is consistent with Greenburg and Bradford's hypothesis (1997).

Of interest, are observations noted of male rats treated with *p*-chlorophenylalanine (PCPA), a compound that inhibits 5-hydroxytryptamine, producing compulsive sexual excitation (Gessa *et al.*, 1970; Tagliamonte *et al.*, 1969) that seems to be associated with depletion of brain 5-hydroxytryptamine. This effect is abolished by castration and is restored and greatly potentiated by the administration of exogenous testosterone (Gessa *et al.*,

1970). Thus, serotonin depletion in the presence of testosterone produces hypersexuality, the absence of testosterone negates this effect. This suggests that both testosterone and serotonin are closely linked in the control of sexual behavior in animals.

In both cases, the patients reported an initial improvement in their ability to control sexual impulses, followed by a decrease in the frequency and intensity of these urges, simulating results obtained in patients with OCD treated with antiobsessional medication. Clomipramine (Clomipramine Collaborative Study Group, 1991), fluoxetine (Tollefson *et al.*, 1994), paroxetine (Zohar and Judge, 1996), fluvoxamine (Jenike *et al.*, 1990), and sertraline (Chouinard *et al.*, 1990) have all been demonstrated to be superior to placebo in the treatment of OCD. The clinical results obtained with these two patients using paroxetine resembles the results obtained while treating patients with OCD with the same medication as well as other SSRIs. One drawback to this clinical report is that a clinical scale measuring obsessive and compulsive symptoms (such as the Y-BOCS scale) was not administered to both patients either before or after treatment (Zohar and Judge, 1996; Jenike *et al.*, 1990; Chouinard *et al.*, 1990). The likely involvement of the serotonin system in the pathophysiology of OCD and impulse control disorders suggests several lines of research to assess the possibility of a link between sexual paraphilias and both disorders, as well as the effect of serotonin on human sexual behavior; drug response to serotonin reuptake inhibitors being one. Unfortunately, no studies looking at the neuroendocrine response of paraphilics to selective serotonin reuptake inhibitors have been published.

Greenburg *et al.* (1996), in a retrospective study comparing the treatment of paraphilias with three serotonin reuptake inhibitors, demonstrated the effectiveness of these medications in the reduction of paraphilic fantasies. However, Stein *et al.* (1992) treated five paraphilics, three of whom had comorbid OCD, with serotonin reuptake inhibitors resulting in improvement of the obsessive-compulsive symptoms but not the paraphilic symptoms.

The use of serotonergic peripheral markers (Marazziti *et al.*, 1992) as well as pharmacologic challenge tests, similar to those performed in patients with OCD (Barr *et al.*, 1992) could be incorporated into studies of sexual paraphilias investigating the role of the serotonin system. Zohar *et al.* (1987) administered 0.5mg/kg of m-chlorophenyl piperazine (mCPP; a metabolite of trazodone) to 12 patients with OCD versus 20 matched controls in a double-blind placebo-controlled study. Half the patients reported an acute, transient exacerbation of their obsessive-compulsive symptoms (Lucey *et al.*, 1993).

Studies comparing the functional neuroanatomy of patients with paraphilias to normal individuals as well as to patients with OCD and impulse control disorders could be potentially useful. Behar *et al.* (1984) compared computerized tomography scans of 17 adolescents with OCD with those of 16 controls. They found significant differences regarding ventricle-brain ratios (VBR), with larger ventricles in patients with OCD. Rapoport *et al.* (1988) reported smaller caudates in adolescents and children with OCD measured with volumetric computerized tomography. Also, Baxter *et al.* (1992) and Swedo *et al.* (1992) found that pharmacologic treatment of obsessive-compulsive disorder that effectively decreases obsessive compulsive symptoms is associated with regional decreases in metabolic activity in the caudate nucleus and the orbitofrontal cortex.

Another aspect involved in the treatment of sexual paraphilics with serotonergic medication is the effect these medications have on sexual function. Fluoxetine (Zajecka *et al.*, 1991; Jacobsen, 1992) as well as sertraline and paroxetine have been associated with a high rate of sexual side effects including decreased libido, delayed orgasm, anorgasmia, and erectile dysfunction (Gitlin, 1994). Hence, the response noted in paraphilics could possibly be indirectly related to an overall reduction in sexual drive rather than a direct response to modulation of the neurotransmitter systems involved in paraphilic behavior. The rates of sexual side effects seem to correlate with the serotonergic effects of these medications, further implicating the serotonin system.

CONCLUSION

Serotonergic medications are effective in the treatment of sexual paraphilias. Recent theories postulated that sexual paraphilias (Kafka, 1994; Greenburg and Bradford, 1997) and sexual addictions (Kafka, 1994) are a manifestation of serotonergic dysfunction, possibly at a hypothalamic level. Furthermore, the serotonergic system (Greenburg and Bradford, 1997) is probably intricately involved in the hypothalamic control of testosterone. Thus, additive treatment using both testosterone-lowering medication and SSRIs could be potentially more effective than either used alone in the treatment of sexual paraphilias.

Further studies investigating the presence of a relationship between sexual paraphilias and OCD as well as impulse control disorders are needed. No studies have been published comparing the efficacy of serotonin reuptake inhibitors to antiandrogen medication, the usefulness of one serotonin reuptake inhibitor versus another, and the rate of reduction of sexual drive with one serotonin reuptake inhibitor versus another. Also re-

quired are studies comparing the functional neuroanatomy of paraphilics to normal individuals as well as to patients with OCD and impulse control disorders.

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