

Case report

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## Topiramate plus citalopram in the treatment of Compulsive-Impulsive Sexual Behaviors

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### Abstract

Compulsive-Impulsive Sexual Behaviors (C-ISBs) include repetitive sexual acts and compulsive sexual thoughts which occur so frequently and with such intensity that they interfere with sexual intimacy and interpersonal and occupational functioning and whose categorization and effective treatments are still unclear. We report the case of a patient affected by C-ISBs and bipolar disorder of type II who improved dramatically after three months' addition of topiramate to citalopram. Topiramate is a powerful anticonvulsant which has recently been proposed also for the treatment of migraine, bipolar disorder and binge eating disorder. This case-report suggests that topiramate might be beneficial in augmentation with citalopram in patients suffering from C-ISBs, although controlled studies to confirm our findings are needed.

### Introduction

Compulsive-Impulsive Sexual Behaviors (C-ISBs) include repetitive sexual acts and compulsive sexual thoughts. The individual feels compelled or driven to perform the behavior, which may or may not cause subjective distress. Although generally not ego-dystonic, the behavior may interfere with several aspects of the patient's life, causing social or occupational impairment, or legal and financial consequences [1,2]. C-ISBs involve a broad range of paraphilic or nonparaphilic symptoms [3]. Paraphilic C-ISBs involve unconventional sexual behaviors in which there is a disturbance in the object of sexual gratification or in the expression of sexual gratification (e.g., exhibitionism, voyeurism). Nonparaphilic C-ISBs, on the other hand, involve conventional sexual behaviors that have become excessive or uncontrolled [3]. The true prevalence of C-ISBs remains unknown, given the heterogeneity of these

disorders as well as the secretiveness of the condition for the majority of the afflicted patients. Investigations conducted in the early 1990s reported prevalence estimates of C-ISBs ranging from 5% to 6% of the US population [3,4]

Although C-ISBs seem relatively common, controlled trials on pharmacological treatments for these disorders are still lacking, and the available literature on this topic consists essentially of open-label and case-report series. Positive findings have been reported with lithium and tricyclics [5-7], selective serotonin reuptake inhibitors [8-11], buspirone [12,13] and nefazodone [14]. In addition, the opioid antagonist naltrexone has recently been shown to be efficacious in some case-reports [15]. Finally, different forms of psychotherapy have been shown to be effective for specific subtypes of C-I sexual behaviors [16].

Topiramate is an orally active anticonvulsant whose mechanisms of action include potentiation of GABA to activate GABA<sub>A</sub> receptors and antagonism of glutamate at specific receptors [17,18]. Although the efficacy of topiramate has not been evaluated yet in the treatment of C-ISBs, previous reports suggest that this compound might be beneficial in a variety of psychiatric illnesses including affective disorders [19,20], eating disorders [21], post-traumatic stress disorder [22] and obsessive-compulsive disorder (OCD) [23]. In addition, some authors [24] have reported an overlap between C-ISBs and OCD and included C-ISBs in a broader obsessive-compulsive spectrum including also impulse-control disorders such as pathological gambling (PG), eating disorders such as binge eating disorder (BED), and other mental conditions such as body dysmorphic disorder and autism. Finally topiramate' putative mood stabilizer properties [19,20] may represent an additional advantage for its use in subjects with comorbid bipolar disorder, like the patient we report here who was successfully treated with a pharmacological augmentation of topiramate plus citalopram.

#### Case report

Mr. A, male, 32 years old, had been suffering since his late teens from C-ISBs in the form of episodes (5–7 a year lasting from 7 to 10 days) of hypersexuality characterized by repetitive masturbation and sexual intercourse (up to 25–30 times a day). On reaching his twenties, having finished school and with a job and salary, he started to meet prostitutes. Episodes became more frequent and his need of compulsive sexual intercourse (up to 30 times in one day) was so intense that he could waste all his salary in just a few days. He developed a depressive episode requiring hospitalization in a day-hospital. The patient was diagnosed as suffering from C-ISBs and bipolar disorder of type II and was initially treated with sertraline (100 mg/d) and lithium salts (900 mg/d). After two months, the depressive symptoms had disappeared, but the patient refused to continue with the mood stabilizer because of significant weight gain (8 kilos). During the subsequent years he presented episodes of opposed polarity, with the presence throughout of C-ISBs, egodystonic when depressed and egosyntonic when euphoric, but he could not take any of the prescribed mood stabilizers, including valproate, carbamazepine, oxcarbamazepine, lamotrigine, or gabapentin, because of various side effects.

His most recent severe depressive episode occurred in the autumn of 2002: he had been depressed after spending his entire salary in just one day with prostitutes, and, on that occasion, had expressed suicidal intention. He was treated with benzodiazepines (only in the first week) and citalopram 20 mg/d, titrated up to 60 mg/d in two weeks. Then adjunctive topiramate was added to his current treatment at an initial dosage of 50 mg, which was titrated up

to 200 mg/d in one month. After three months of this pharmacological regimen, depressive symptoms and sexual urges were significantly decreased and citalopram was reduced progressively until cessation. The patient was maintained on topiramate only which, given the mild mood shifts, was increased to 400 mg/d and continued for one year, with no relevant side-effects. During this period the patient experienced for the first time in his life a long period of stability with a normal arousal pattern, and he began a loving relationship which is still ongoing.

#### Discussion

C-ISBs are characterized by abnormal sexual behaviour in terms of frequency and intensity of arousal patterns, which provokes significant subjective sufferance, as well as impairment of social relationship and work activities. In addition, the stigma related to sexual (and mental) disturbances understandably represents an obstacle to reliable information on the prevalence of C-ISBs and this also provides an explanation of the few clinical studies in the field.

Although prevalent and impairing, C-ISBs have not been systematically investigated from a pharmacological point of view, and different medications have demonstrated to be effective, although generally not in randomised controlled trials [25]. The efficacy of many pharmacological treatments in C-ISBs could also reflect the various dimensional approaches to C-ISBs in terms of psychopathologic and clinical similarities and overlaps with other Axis I disorders. In fact, the most consistent findings on this topic tend to categorize C-ISBs either as an impulse control disorder or as an entity belonging to the bipolar spectrum disorders: this represents the rationale for the use of mood stabilizers in C-ISBs.

The case report described herein underlines this link between C-ISBs and bipolar spectrum disorders and suggests that, amongst mood stabilizers, topiramate might be particularly useful in the broader area of impulse control disorders. However, topiramate-induced cases of hypomanic and manic episodes have also been reported in literature [26,27]. Nevertheless, the pharmacological profile of topiramate including a rapid onset of action along with a low weight gain liability and sexual dysfunction may represent a further interesting feature for future research with this drug.

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