A case of mania presenting with hypersexual behavior and gender dysphoria that resolved with valproic acid

Michelle R. Heare,[1] Maria Barsky,[1] Lawrence R. Faziola[2]

[1]University of California, Irvine; [2]Department of Psychiatry and Human Behavior, University of California, Irvine, CA, USA

Abstract

Hypersexuality and gender dysphoria have both been described in the literature as symptoms of mania. Hypersexuality is listed in the *Diagnostic and Statistical Manual of Mental Disorders 5* as part of the diagnostic criteria for bipolar disorder. Gender dysphoria is less often described and its relation to mania remains unclear. This case report describes a young homosexual man presenting in a manic episode with co-morbid amphetamine abuse whose mania was marked by hypersexuality and the new onset desire to be a woman. Both of these symptoms resolved with the addition of valproic acid to antipsychotics. This case report presents the existing literature on hypersexuality and gender dysphoria in mania and describes a treatment option that has not been previously reported.

Introduction

Sexual or erotic excitement has been noted as a feature of mania since 1892.[1] In the *Diagnostic and Statistical Manual of Mental Disorders 5*, hypersexuality is listed as part of the diagnostic criteria for bipolar disorder. Despite descriptions of hypersexuality in mania, there have been few formal studies on the matter. A literature review reveals no precise definition of hypersexuality in bipolar disorder, no extensive description hypersexual behavior, and scant information about the manifestations and frequency of hypersexual behavior in specific populations.

The data that exist about hypersexuality in mania is largely derived from seven observational studies published between 1969-1979. Hypersexuality was observed in 57% of manic patients (averaged across seven studies, ranging from 25 to 80%).[2-8] In 1973, Carlson and Goodwin observed 20 manic-depressive patients and concluded that a manic episode has three stages, starting as heightened sexual thoughts and activity in the first stage and then progressing to sexual preoccupation and ending in sexual delusions.[9] A small body of literature also exists which describes hypersexuality in amphetamine users. Angrist and Gershon described *intensified sexual feelings*, and *increased sexual tension* amongst amphetamine users in their paper published in 1976.[10]

Gender confusion in the context of mania is even less often described in the literature than hypersexuality. Chakrabarti and colleagues described a case of a male patient who exhibited problematic provocative behavior as well as expressed a desire to be female and had a delusion that he was married to a man. He eventually improved with lithium and electroconvulsive therapy.[11] In some case reports, manic episodes precipitate or intensify the desire to be another gender, while in others, the manic episode made these desires less pronounced.[12-14]

This case report describes a young homosexual man presenting in a manic episode with co-morbid amphetamine abuse whose mania was marked by hypersexuality and the desire to be a woman. Both of these symptoms of mania resolved with treatment of the manic episode with valproic acid.

Correspondence: Michelle R. Heare, University of California, Irvine CA 92697, USA.
Tel: +1.530.902.7573.
E-mail: mrabowsk@uci.edu.

Key words: Psychiatry; mania; hypersexual; gender dysphoria.

Contributions: MRH, data collecting, manuscript writing, references search; MB, manuscript writing and references search; LRF, manuscript reviewing and writing.

Conflict of interest: the authors declare no potential conflict of interest.

Received for publication: 16 April 2016.
Revision received: 2 June 2016.
Accepted for publication: 2 June 2016.

Licensee PAGEPress, Italy
Mental Illness 2016; 8:6546
doi:10.4081/mi.2016.6546

Case Report

A 28-year-old homosexual male was brought to the emergency department after he was found destroying property at his home. On presentation, he was very disorganized and stated that he had blood coming from his rectum. On physical exam, no rectal bleeding was found. He appeared euphoric and stated that his mood was *happy and scared*. He denied any past psychiatric history and any prior use of psychiatric medications. His urine toxicology screen was positive for amphetamines. He was admitted to the acute adult inpatient psychiatric unit for observation.

Collateral information from his mother confirmed that he had a normal development and childhood and graduated from high school. She stated that he had always identified as a homosexual male, and had never expressed feelings of being a different gender or the desire to be a woman. He did not show any signs of mental illness until 3 years prior to his hospitalization when his mother states that he *fell into a depression*, which was characterized by talking to himself, lack of self-care, and loss of sleep and appetite. She corroborated that the patient had never taken psychiatric medications. At this same time his mother stated that she believes he started to use alcohol and drugs *heavily*, although she did not know what type or how often he used them. She denied any other mental illness or substance abuse in their family. During his first day in the hospital, the patient reported that his mood was good and denied any hallucinations, paranoia, or suicidal ideation. He remained disorganized, and spent his first night in the hospital pacing the unit without sleep. He was started on risperidone 0.5 mg twice a day for psychosis and risperidone 0.5 mg as needed every 8 hours for anxiety and agitation. He was placed on precautions for possible alcohol withdrawal due to possible recent alcohol use, which was reported by his mother. On hospital day two, the patient was seen coming out of the bathroom with another male patient. At this time, he was placed on hypersexual precautions and was instructed to maintain a 10-foot distance from all other patients. That same day, the patient suggestively groped a male staff member's hand while receiving food. He was placed on one to one supervision due to his inappropriate behaviors. During his second night in the hospital he was recorded to have slept 4.5 hours. For the rest of his stay, he slept 7-10 hours each night. Risperidone was increased gradually to 4 mg nightly for psychotic mania and valproic acid extended release 1500 mg at nighttime was started with a goal of improving impulsivity and hypersexuality. Three days following initiation, serum values of valproic acid were 75 mcg/mL, with normal complete blood count and liver function.

Modest improvement in intrusive and hypersexual behaviors allowed for the discontinuation of the one to one sitter, but continued suboptimal response led to transition from risperi-

done to quetiapine on hospital day eight. On the 13th day of his hospitalization, the patient voiced that he felt like he was a woman. He stated that he heard voices telling him that he was *a beautiful woman*, and he asked to speak with a doctor as soon as possible about getting gender reassignment surgery. He continued to voice feeling like a woman for two more days. He also began to wear bright pink lipstick and dance and sing loudly.

On the 15th day of his hospitalization, his symptoms of mania remained uncontrolled, valproic acid extended release was increased to 2000 mg nightly, and quetiapine was cross-titrated to perphenazine. By the 23rd day of his hospitalization, with valproic acid levels of 88 mcg/mL, he no longer had any hallucinations or paranoid ideation, was no longer hypersexual, did not have feelings of gender dysphoria, and was much improved in his ability to converse rationally. He was discharged home on valproic acid extended release 2000 mg nightly, perphenazine 6 mg twice daily, and zolpidem 5 mg for insomnia.

Discussion and Conclusions

The patient presented in this case report had a manic episode marked by hypersexual behavior that progressed through at least two of the three stages of mania which were described by Carlson and Goodwin; sexual thoughts and activity as demonstrated by his inappropriate sexual behavior towards staff and sexual delusions of gender dysphoria. This episode of mania was not only characterized by hypersexuality, but also disorganized behavior and thought, delusions of rectal bleeding, and mood symptoms of euphoria. It is uncertain if the patient's amphetamine use exacerbated the hypersexuality that this patient displayed, or induced the episode of mania. Given the patient's inability to express exactly when he used amphetamine, the uncertainty of how much he used, and his mother's ambiguous description of his psychiatric history, it is unclear if the patient had had prior manic episodes without the use of amphetamine. This case adds to the current knowledge of hypersexuality in manic patients, particularly the materialization of gender dysphoria in a patient with comorbid amphetamine abuse.

A limited number of prior studies have looked at the differing presentations of hypersexuality in specific populations, and a dearth of descriptions exist to relate to this substance misusing homosexual male. In their 1960 study Allison and Wilson studied the sexual behavior of 24 manic patients and found that women were more promiscuous then men, but both sexes had increased sexual intercourse in mania.[2] Volavka and colleagues found that bipolar women were more likely than men to engage in sex with IV drug users and with partners who had AIDS.[15] Meade and colleagues found that patients with co-occurring bipolar and substance abuse exhibited high-risk hypersexual behaviors that increased their risk for HIV.[16] A literature review did not yield any studies of manifestations of hypersexuality in homosexual patients. Further study into the frequency and characteristics of hypersexuality in patients with co-morbid amphetamine abuse and mania may help to elucidate any unique risk factors in this population.

Our case illustrates hypersexuality and gender dysphoria resolving with adequate mood stabilization. Perhaps mood stabilizers, and in particular valproic acid, have a special role in treatment of mania marked by hypersexuality. It is important to note that the efficacy of valproic acid in this case may be due to its effect on antipsychotic augmentation as well as its mood stabilizing properties. A review of treating inappropriate sexual behavior in people with dementia has proposed several possible pharmacologic agents including antidepressants, anti-androgens, estrogens, antipsychotics, GnRH analogues, cholinesterase inhibitors, antihistamines, beta-blockers, antifungals, and diuretics. No clear evidence emerged to support use of one particular agent.[17] Patients with Kleine-Levin syndrome, a disorder marked by hypersexuality, have been treated with mood stabilizers, but no studies have demonstrated a significant benefit of mood stabilizers alone.[18]

Hypersexuality is an accepted symptom of mania, but more subtle forms may be easily missed when screening patients. For the patient presented here, hypersexuality was the most pronounced symptom that helped to guide his treatment. Before the patient began experiencing overt hypersexuality, it was unclear to the physicians if the patient was having a manic episode or amphetamine induced psychosis. When the treating physicians recognized hypersexuality as a symptom of mania, they decided to add a mood stabilizer to his treatment that ultimately resulted in his recovery. Hypersexuality can cause significant distress to patients in their relationships, as well as expose them to substantial risk of communicable disease. Continuing research may help guide psychiatrists and primary care physicians to both recognize the symptom early and treat appropriately.

References

1. Goodwin F, Jamison K. Manic-depressive illness. New York: Oxford University Press; 1990.
2. Allison J, Wilson W. Sexual behavior of manic patients: a preliminary report. South Med J 1960;53:870-4.
3. Carlson G. The stages of mania. Arch Gen Psychiatry 1973;28:221.
4. Leff J, Fischer M, Bertelsen A. A cross-national epidemiological study of mania. Br J Psychiatry 1976;129:428-42.
5. Loudon J, Ashworth C, Blackburn I. A study of the symptomatology and course of manic illness using a new scale. Psychol Med 1977;7:723.
6. Carlson G, Strober, M. Affective disorders in adolescence. Psychiat Clin N Am 1979;2:511-26.
7. Clayton P, Pits FN Jr, Winokur G. Affective disorder: IV. Mania. Compr Psychiat 1965;6:313-22.
8. Winokur G, Clayton P, Reich T. Manic depressive illness. St. Louis: C.V. Mosby; 1969.
9. Carlson G. The stages of mania. Arch Gen Psychiatry 1973;28:221.
10. Angrist B, Gershon S. Clinical effects of amphetamine and l-DOPA on sexuality and aggression. Compr Psychiat 1976;17:715-22.
11. Chakrabarti N, Sinha VK, Parial A. Secondary gender identity disorder - a case report. Indian J Psychiat 1999;3:257-9.
12. Habermeyer E, Kamps I, Kawohl W. A case of bipolar psychosis and transsexualism. Psychopathology 2003;36:168-70.
13. O'Gorman EC. The effect of psychosis on gender identity. Br J Psychiatry 1980;136:314-5.
14. Mayer C, Kapfhammer HP. [Coincidence of transsexuality and psychosis]. Nervenarzt 1995;66:225-30. [Article in German]
15. Volavka J, Convit A, Czobor P, et al. HIV seroprevalence and risk behaviors in psychiatric inpatients. Psychiatry Res 1991;39:109-14.
16. Meade C, Graff F, Griffin M, Weiss R. HIV risk behavior among patients with co-occurring bipolar and substance use disorders: Associations with mania and drug abuse. Drug Alcohol Depend 2008;92:296-300.
17. Joller P, Gupta N, Seitz DP, et al. Approach to inappropriate sexual behaviour in people with dementia. Can Fam Physician 2013;59:255-60.
18. Miglis MG, Guilleminault C. Kleine-Levin syndrome: a review. Nat Sci Sleep 2014;6:19-26.