LETTER TO THE EDITOR

The Value of Spousal Involvement in the Management of Psychogenic Polydipsia: A Case Report

To the Editor: Psychogenic polydipsia is a rare disorder of which the primary clinical feature is excessive drinking of water or other fluids in the absence of a physiologic stimulus to drink.¹ Excessive water intake can worsen psychiatric symptoms; can produce nausea, vomiting, delirium, ataxia, seizures, and coma; and can be fatal.¹ The diagnosis of psychogenic polydipsia is one of exclusion and requires special investigation and management; the most useful test is the water deprivation test, which should be considered carefully.² In this condition, the patient's chronic desire to drink water diminishes the response of the kidneys to antidiuretic hormone so that they are not able to concentrate urine to maximal levels.¹ Patients with psychogenic polydipsia can easily tolerate excessive water drinking unless hyponatremia (low sodium in the blood) supervenes.¹ It is important for clinicians to keep in mind that psychogenic polydipsia, similar to schizophrenia, has a relapsing course and warrants vigilance and appropriate management.² Working toward resolving the main cause of the disorder will help in improving management of the excessive fluid intake.²

It is also a challenge for psychiatrists to recognize both the potentially severe complications of this disorder in patients with comorbid mental illness and the necessity of including management of the dysregulation of fluid intake when treating these patients. We report a novel finding in the treatment of psychogenic polydipsia, which is the value of spousal involvement in the management of the disorder, perhaps above the value of pharmaceutical interventions. We have not found any literature considering the value of spousal involvement in the treatment of psychogenic polydipsia. It is our hope that this case report will promote future studies comparing the treatment of psychogenic polydipsia with spousal involvement in the treatment plan prior to initiation of medication. A psychogenic polydipsia model requires a milieu that balances maximizing the patients' treatment with their safety.²

Case Report

Initial presentation. Mr A, a 52-year-old married white man, was brought to our psychiatric emergency room by ambulance at the request of his wife. Mr A was admitted to the hospital because he had been exhibiting excessive need to drink water for an extended period of time. He had been vomiting for 2 days with feelings of confusion and headache. He was found to have a sodium level of 115 mmol/L. He was stabilized and transferred from the medical floor to the psychiatry unit for management of psychogenic polydipsia (DSM-IV criteria). After Mr A was admitted to the psychiatric unit, he reported that he had been drinking too much water for a long time because he thought that his wife was going to die. He was concerned about these worries, and, to relieve the anxiety, he kept drinking water, which made him feel better. Mr A was aware that this behavior could kill him, but he could not control the urge to drink water. He also reported that he was depressed and that in the last few weeks, his sleep was reduced to 4 to 5 h/d from 8 to 10 h/d previously. He also reported that his appetite was increased, and his weight had been increasing consistently. He reported feeling hopeless and helpless and that he was a burden to his wife. He denied suicidal or homicidal ideations. He denied hearing voices or any paranoia. Mr A's wife reported that he has been drinking a lot of water for many years, but in the last 2 years, his intake had increased remarkably, and, at home, he constantly drank water (10-14 L/d).

Past history. Mr A had a past psychiatric history that began at the age of 28 years. He had problems with anxiety and psychogenic polydipsia and had repeated admissions to our psychiatric unit, where his psychogenic polydipsia was diagnosed after ruling out any other possible causes and performing the water deprivation test. The reason for most of his hospitalizations was depression/anxiety and polydipsia. His most recent hospitalization was 6 months prior for depression and polydipsia. During Mr A's previous hospitalizations, no treatment had been found for his water-drinking habit. He reported that he tried lithium, valproic acid, selective serotonin reuptake inhibitors, clonazepam, valsartan, and metformin in the past with no benefit in regard to his water-drinking habit. Mr A denied any history of past suicide attempts. He also denied any history of violence or legal problems.

Hospital course. When Mr A was admitted to the psychiatric inpatient unit, his vital signs were stable. His electrolytes had normalized and were monitored every 2 days. He was placed on every 15-minute watch for prevention of excessive water drinking and on 1:1 supervision for monitoring fluid intake. Mr A was limited to no more than 1,200 mL of fluid in 24 hours, and the bathroom was kept locked to restrict water intake. His medications during his hospitalization included risperidone, sertraline, clonazepam, hydrochlorothiazide, valsartan, enalapril, and metformin. We readjusted his psychotropic medications by increasing the risperidone dose from 2 mg to 4 mg daily to make sure he was taking a dose that may be helpful in reversing his symptoms of excessive drinking.³ We also gave other medications that have some evidence of reducing psychogenic polydipsia symptoms,³ such as olanzapine, valsartan, and enalapril. After the trial of these medications, Mr A's desire to drink water persisted even though his depression and anxiety symptoms were alleviated. During the hospital course, we did consider a trial of clozapine for his condition. However, because of the possibility of major side effects, we could not justify off-label use of clozapine in this patient.

The value of spousal involvement. On Mr A's third week of hospitalization, we decided to call his spouse in order to include her in his treatment plan. We discussed Mr A's condition with his spouse and requested that she monitor his fluid intake and, at the same time, provide continuous emotional support by giving him constant reassurance that nothing will happen to her. We also coached Mr A in the following mental techniques: thought stopping and diverting attention to some other thought that will keep him relaxed. We also instructed Mr A's spouse to support him in practicing these techniques. We continued to provide support, and his spouse was there to motivate him to restrict his water intake. His sodium level stayed in the normal range after 2 weeks. Mr A consumed less water. His sleep and appetite were fine. He was compliant with medications. Finally, when Mr A was able to resist his extreme water-drinking habit, 1:1 watch was discontinued, and he was placed on every 15-minute watch for prevention of excessive water drinking.

Mr A was discharged after 4 weeks with a referral for weekly client-oriented outpatient therapy for 4 weeks, followed by monthly outpatient therapy. Mr A's spouse continued to provide him with constant support throughout the treatment. He stopped drinking water excessively and was more cooperative and responsive to direction from his wife and therapist. To date, we have followed up with this patient through 8 months.

It is well known that noncompliance rates are high in patients with mental illness, especially with regard to therapeutic fluid restriction.¹ There are various psychotropic trials for medications to treat psychogenic polydipsia, but these drugs may not have long-term effects on improving symptoms. For example, clozapine, low-dose risperidone, and olanzapine have been demonstrated to be effective treatment for polydipsia in both schizophrenic and nonschizophrenic patients with psychogenic polydipsia.^{4–6} The use of angiotensin II receptor antagonists has been studied as adjunct treatment of psychogenic polydipsia through inhibition of the thirst-inducing effects of angiotensin. While some research has demonstrated that a combination of behavioral treatments and medication has been shown to be effective in the long term,² other literature reported long-term antipsychotic use may also actually increase the chances of developing psychogenic polydipsia.⁷

© 2014 COPYRIGHT PHYSICIANS POSTGRADUATE PRESS, INC. NOT FOR DISTRIBUTION, DISPLAY, OR COMMERCIAL PURPOSES, Prim Care Companion CNS Disord 2014;16(5):doi:10.4088/PCC.14l01671 In our case, spousal involvement and the provision of intense support was highly successful, even more so than pharmacologic intervention. Prior to this intervention, the patient required rehospitalization within 6 months of a previous admission. Since our intervention of inviting his spouse to play a leading role in his psychogenic polydipsia treatment, Mr A has not required hospital admission.

The use of medication can be considered the adjuvant treatment, while water restriction and the full-time involvement of the spouse is the first-line treatment for nonemergency psychogenic polydipsia cases. While our case involved the patient's spouse, we would suggest involvement of any other primary caretaker or involved partner for future research.

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