

Since Ms. A suffered from treatment-resistant depression, she was instructed to stop taking jujube and to resume taking venlafaxine. She was not rechallenged with jujube but took venlafaxine, 150 mg/day, for 1 month without side effects.

Jujube is reputed to have anxiolytic, hypnotic, appetite-stimulating, narcotic, and antiarrhythmic effects with low toxicity (3). Its pharmacological effects are incompletely understood but are thought to be due to triterpenes. Evidence to support these claims and of its active component is limited (3). Furthermore, the U.S. Food and Drug Administration has detained importation of *Ziziphus jujube* by 20 manufacturers or shippers from China because of contamination of 60% of the product with rodent, cat, bird, and insect filth (4).

Physicians should ask patients about the use of herbal remedies and advise their discontinuation before prescribing antidepressant drugs if there is a possibility of serious harm. Since many herbal products lack quality control and information concerning potential interactions with other substances is limited, it is often difficult to determine their safety. Until further information is available, jujube should not be combined with antidepressants.

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#### Polyuria After Olanzapine Overdose

TO THE EDITOR: We report the case of a patient with a history of borderline personality disorder who developed polyuria after an olanzapine overdose.

Adam, a 17-year-old boy, was treated with prazepam and olanzapine, 5 mg b.i.d. He was admitted to our intensive care unit after he had ingested 15 tablets (75 mg) of olanzapine and 7.5 mg of prazepam in a suicide attempt. He had no history of polydipsia. A comprehensive drug screen detected no other substances. He had mild CNS depression with otherwise normal vital signs. Within the first 24 hours of admission, Adam developed a high urinary output (5400 ml/24 hours), with diluted urine. At that time, his urine density was 1.004, his urine osmolality was 166 mosmol/kg H<sub>2</sub>O, and his serum osmolality was 287 mosmol/kg H<sub>2</sub>O. His sodium blood level rose from 132 mmol/liter at admission to 141 mmol/liter when Adam was polyuric. His glucose blood level was within the normal range. His blood concentration of ADH was 3.1 pg/ml (normal range=0.0-8.0), and his thyroid-stimulating hormone level was 6.01  $\mu$ U/ml (normal range=0.2-3.5), with normal total triiodothyronine and thyroxine values. Adam's polyuria corrected after the intravenous administration of 4  $\mu$ g of desmopressin (and 2  $\mu$ g 12 hours later).

He was discharged from the intensive care unit on day 3. No recurrence of polyuria was noted at the 1-month follow-up. Magnetic resonance imaging of the hypothalamic-pituitary area, performed 2 months after discharge, was normal.

The constellation of polyuria, hyposmolar urine (166 mosmol/kg H<sub>2</sub>O), normosmolar plasma, and an increasing level of serum sodium supports the diagnosis of diabetes insipidus in our patient. The rapid resolution of polyuria after administration of a small dose of desmopressin (total of 6  $\mu$ g in 12 hours) supports the central origin of diabetes insipidus because desmopressin decreases urinary output in central but not in nephrogenic diabetes insipidus (1). Additionally, urine osmolalities lower than 200 mosmol/kg H<sub>2</sub>O are uncommonly seen in nephrogenic diabetes insipidus (2). The low normal level of ADH in this patient probably represents early or partial central diabetes insipidus.

Although olanzapine is considered to be a safe agent, there are several reports associating it with the development of hyperglycemia, diabetes mellitus (3), and weight gain (4). To our knowledge, olanzapine has not been associated with the development of central or nephrogenic diabetes insipidus. Although schizophrenia has been reported to be associated with polyuria, diabetes insipidus is usually related to lithium therapy and is then of the nephrogenic type. Of note is that olanzapine is chemically related to clozapine, which has been linked to the occurrence of nephrogenic diabetes insipidus (5). We conclude that diabetes insipidus can possibly occur with high doses of olanzapine.

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#### Oxcarbazepine as an Adjunct for Schizophrenia

TO THE EDITOR: Despite recent advances, about a quarter of all acutely ill schizophrenic patients still fail to respond to psychopharmacological treatment, even with the newer antipsychotic agents, and side effects remain frequent (1).

The adjunctive administration of anticonvulsant drugs, such as carbamazepine, divalproex, and lamotrigine, has been proposed as a useful treatment strategy for these patients but remains controversial. Under controlled conditions, carbamazepine showed adjunctive effects to antipsychotic treat-