

A questionable diagnosis

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Mr. O is admitted to the hospital for delusions and bizarre behavior. He has a 56-year psychiatric history and a diagnosis of schizoaffective disorder. Could there be another cause of his symptoms?

CASE Space traveler

Mr. O, age 69, is a patient at a long-term psychiatric hospital. He has a 56-year psychiatric history, a current diagnosis of schizoaffective disorder, and suffered a torn rotator cuff approximately 5 years ago. His medication regimen is haloperidol decanoate, 100 mg IM every month, duloxetine, 60 mg/d, and naproxen, as needed for chronic pain.

He frequently lies on the floor. Attendants urge him to get up and join groups or sit with other patients but he complains of pain and soon finds another spot on the floor to use as a bed.

Eight months earlier, a homeless shelter sent Mr. O to the emergency room (ER) because he tried to eat a dollar bill and a sock. In the ER he was inattentive, with loose associations and bizarre delusions; he believed he was on a spaceship. Mr. O was admitted to the hospital, where clinicians noted that his behavior remained bizarre and he complained of insomnia. They also noted a history of setting fires, which complicated discharge planning and contributed to their decision to transfer him to our psychiatric facility for longer-term care.

During our initial interview, Mr. O readily picks himself off the floor. His responses are logical and direct but abrupt and unelaborated. His first and most vehement complaint is pain. Zolpidem, he says, is the only treatment that helps.

He says he began using zolpidem approximately 5 years ago because pain from a shoulder injury kept him awake at night. When he could not obtain the drug by prescription, he bought it on the street. One day when living in the homeless shelter, he took 30 or 40 mg of zolpidem, then “blacked out” and awoke in the ER.

His first experience with psychiatric treatment was the result of problems getting along with his single mother because of “petty things” such as shooting off a BB gun in their apartment, he says. As a teenager he was sent to a boarding school; as a young adult, to a psychiatric hospital. After his release he returned to his mother’s apartment. He worked steadily for 20 years before he obtained Social Security benefits, and then worked intermittently “off the books” until approximately 15 years ago. Mr. O lived with his mother until her death 17 years earlier, and then in her apartment alone until a fire, which he set accidentally by smoking in bed after taking zolpidem, forced him to leave 3 years ago. He says, “My whole life was in that place.” He was admitted to a psychiatric hospital for an unknown reason, which was his first psychiatric admission in 40 years. After he was released from the hospital, Mr. O lived in various homeless shelters and adult homes until his current hospitalization.

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Which disorders most likely account for Mr. O's presentation?

- a) schizoaffective disorder and chronic pain due to shoulder injury
- b) schizoaffective disorder, chronic pain, and zolpidem-induced delirium, resolved
- c) chronic pain and zolpidem-induced delirium, resolved
- d) unclear given the information available at this time

The author's observations

An effective and well-tolerated drug with a reputation for rarely being abused, zolpidem is widely prescribed as a hypnotic. Zolpidem and benzodiazepines have different chemical structures but both act at the GABA_A receptor and have comparable behavioral effects.¹ The reported incidence of zolpidem abuse is much lower than the reported rate of benzodiazepine abuse when used for sleep²; however, abuse, dependence, and withdrawal have been reported.²⁻⁴ Zolpidem abuse seems to be more common among patients with a history of abusing other substances or a history of psychiatric illness.² A French study⁴ found that abusers fell into 2 groups. The younger group (median age 35) used higher doses—a median of 300 mg/d—and took zolpidem in the daytime to achieve euphoria. A second, older group (median age 42) used lower doses—a median of 200 mg/d—at nighttime to sleep.

There are few reports of delirium and symptoms such as visual hallucinations and distortions associated with zolpidem use.^{5,6} These reactions have occurred in persons without a history of psychosis. They usually are associated with doses ≥ 10 mg.

In the ER Mr. O showed a disturbance in consciousness with inability to focus attention and a perceptual disturbance (he believed he was in a spaceship) that developed over hours to days. He met criteria for delirium, possibly caused by zolpidem, but his presentation also could have been attributable to an underlying psychiatric disorder.

ER and inpatient psychiatrists noted Mr. O was intoxicated with zolpidem when the shelter brought him to the ER, but both groups diagnosed schizoaffective disorder and treated him with antipsychotics. They saw his >50-year psychiatric history as evidence of an underlying, long-standing condition such as schizoaffective illness.

However, features of Mr. O's illness are not typical of a chronic psychotic illness. He recalls psychiatric hospitalizations in his youth and recently, but not for the 40 years in between. Mr. O says he has never experienced auditory hallucinations. For these reasons, our treatment team obtains old medical records to investigate his early history (*Table, page 56*).

HISTORY Destructive and defiant

Mr. O's mother reported that he had been a nervous, restless child who would scream and yell at the slightest provocation. At age 10 he became wantonly destructive. His mother bought him an expensive toy that he destroyed after a short time; he asked for another toy, which he also destroyed. When such behavior became more frequent, she took him to a city hospital, where he was treated for 6 weeks and released at age 13. He was sent to a boarding school but soon was expelled for drinking and selling beer.

Mr. O was admitted to long-term psychiatric facilities 6 times in the next 10 years, from the late 1950s to the late 1960s. He was first admitted at age 17 for temper tantrums during which he fired an air rifle and smashed windows in the home he shared with his mother. During examination he had no delusions or hallucinations but did have flat affect and a hostile attitude. Doctors documented that almost all his tantrums were as a result of interactions with his mother.

Records from this psychiatric admission state that Mr. O showed no unusual distractibility, "psychotic trends," or paranoid thinking. After approximately 6 months in the hospital he was discharged home with the diagnosis of

Clinical Point

Delirium and symptoms such as visual hallucinations and distortions have been reported with zolpidem use

Table

Mr. O's clinical course

Age	Symptoms/behaviors	Diagnosis
17	Temper tantrums and destructive behaviors. No delusions or hallucinations but a flat affect and hostile attitude	Primary behavior disorder, simple adult maladjustment
22	Returned to the psychiatric hospital when his welfare payments stopped; "psychopathic" symptoms; described as defiant and resented authority and regular work	Primary behavior disorder
24	His mother complained that he stole from her and carried a weapon; while hospitalized, described as manageable and without overt psychotic symptoms	Primary behavior disorder
26	Arrested for causing property damage while intoxicated on alcohol; silly laugh, loose associations, irrelevant and incoherent speech, and believed hospital staff were against him	Psychosis with psychopathic personality
66	A fire that he set accidentally while smoking in bed after taking zolpidem destroyed his home	Diagnosis unknown
68	Transferred from a homeless shelter to the ER after he took 30 to 40 mg of zolpidem and exhibited bizarre behaviors	Schizoaffective disorder
69	More spontaneous, remains logical and relevant after haloperidol is discontinued; no delusions or hallucinations, still complains of pain	Substance use disorder and personality disorder

ER: emergency room

Clinical Point

After his fifth psychiatric admission, Mr. O was described as a psychopath with a history of drinking, stealing, and delinquent tendencies

primary behavior disorder, simple adult maladjustment. Mr. O, who was age 18 at the time, and his mother were eager for him to complete high school and learn auto mechanics.

Nine months later, he returned to the psychiatric facility because of excessive drinking and inability to secure employment, according to his records. In the hospital, he was productive and reliable. When he was discharged home 3 months later, doctors wrote that his determination to stop drinking was firmly fixed. They encouraged Mr. O to complete high school as a night student and find employment during the day. His mother was delighted with his improvement.

A third admission, less than 2 months later, occurred after he broke a window during an argument with his mother. He had a job but quit. After 5 months he was discharged with the same diagnosis of primary behavior disorder, but his mother would not let him back in her home. He was referred to the social service department to be placed on welfare.

A year later, Mr. O had trouble managing his welfare allotment and moved repeatedly. He said he returned to the psychiatric hospital because his welfare payments had been discontinued. During this admission, doctors noted "psychopathic" symptoms; Mr. O was defiant and resented authority and regular work. Mr. O eloped from the hospital several times and brought beer into the building. After 18 months he was discharged with the same diagnosis, with plans to apply for welfare. He was not prescribed medication.

Mr. O's fifth admission came nearly 2 years later after his mother complained that he stole from her home and carried a weapon. In the hospital he was described as manageable and without overt psychotic symptoms. When he was discharged a little more than a year after being admitted, doctors wrote that he was a psychopath who had a history of drinking, stealing, and delinquent tendencies as a teenager. His diagnosis remained primary behavior disorder.

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A year after this discharge, Mr. O was arrested for causing serious property damage when he was intoxicated on alcohol. Subsequently he was readmitted.

After a few months in the hospital, Mr. O changed. He developed a silly laugh, loose associations, irrelevant and incoherent speech, and a belief that hospital staff were against him. Although Mr. O denied auditory hallucinations, a psychiatrist wrote that he seemed to be experiencing hallucinations and prescribed chlorpromazine. The next day Mr. O slashed his arms and legs in several places, requiring many sutures. His diagnosis was changed to psychosis with psychopathic personality. However, within a few months, psychiatrists determined that Mr. O had recovered, so they stopped chlorpromazine. Months later, clinicians wrote that Mr. O was idle most of the time, neat, clean, and not involved in arguments with other patients. He was discharged after 1 month in the hospital.

Over the years, psychiatrists had differing opinions about Mr. O's diagnosis. One noted that his mental illness was characterized by emotional instability and poor judgment. He had impulsive reactions without regard for others, rapid mood swings, irritability, and depression with transient paranoia. Another clinician detected evidence of schizoid personality disorder because Mr. O did not experience hallucinations or a gross thought disorder, but did have rambling, circumstantial, autistic (unrealistic), and ambivalent thought content. Another psychiatrist wrote Mr. O best fit in the category of psychosis with psychopathic personality, which was his diagnosis at discharge from his sixth hospitalization.

Bottom Line

Questioning long-standing diagnoses when current symptoms do not meet criteria can lead to more rational treatment. A psychotic episode and a long history of psychiatric illness should not automatically lead to the conclusion that a patient has schizophrenia or schizoaffective illness. Zolpidem usually is safe for treatment of insomnia, but it can be abused and can lead to delirium and psychosis.

Related Resource

• Aggarwal A, Sharma DD. Zolpidem withdrawal delirium: a case report. *J Neuropsychiatry Clin Neurosci*. 2010;22(4):451.

Drug Brand Names

Chlorpromazine • Thorazine	Haloperidol • Haldol
Clozapine • Clozaril	Naproxen • Naproxyn, Aleve, others
Duloxetine • Cymbalta	Zolpidem • Ambien
Haloperidol decanoate	
• Haloperidol decanoate	

Disclosure

The author reports no financial relationship with any company whose products are mentioned in this article or with manufacturers of competing products.

How would you manage Mr. O's treatment at this time?

- stop haloperidol
- increase haloperidol
- change to clozapine or another atypical antipsychotic agent for better control of negative symptoms
- continue to investigate options for chronic pain

The author's observations

Mr. O's old medical records revealed the diagnostic thinking and treatment practices of a past era. They did not demonstrate that Mr. O met current criteria for schizophrenia or schizoaffective disorder, although he may have had a brief psychotic episode. Because there was little support for a diagnosis of schizoaffective illness and haloperidol use, we stopped the drug but continued duloxetine for chronic pain. It was clear that he has a substance use disorder and perhaps met criteria for antisocial personality disorder.

Clinical Point

Mr. O's medical records did not show that he met current criteria for schizoaffective disorder, although he may have had a brief psychotic episode

OUTCOME Further explanations

Approximately 2 months after stopping haloperidol, Mr. O is more spontaneous, logical, and relevant. He does not have delusions or hallucinations. Despite further attempts at pain management with physical therapy and increased doses of duloxetine, he still complains of pain. We do not prescribe zolpidem.

Mr. O is unwilling to discuss the incident more than 40 years ago when he cut his arms and legs except to say, "That's the past. My life wasn't so good at that time." When we ask why he had been a client of Adult Protective Services 5 years before he was burned out of his apartment, he admitted that he was 21 months in arrears in his rent. "I used to do this thing called crack," he explains. He was

discharged to an adult home with a prescription for duloxetine after he promised to never smoke in his room again.

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Clinical Point

It was clear that Mr. O has a substance use disorder and perhaps antisocial personality disorder

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