Current PSYCHIATRY

CASES THAT TEST YOUR SKILLS

Mr. D's mood symptoms persist after 1 year of therapy.

You suspect a medical cause but he can't afford routine lab tests.

How would you get this truck driver on the road to remission?

When depression treatment goes nowhere

Ahsan Y. Khan, MD
Assistant professor

Katherine Grimsley, MD
Third-year psychiatry resident

Department of psychiatry and behavioral health, University of Kansas School of Medicine, Wichita

HISTORY LOSING HIS 'DRIVE'

Mr. D, age 49, has been treated for major depressive disorder for approximately 1 year but reports only occasional minor symptom improvement. At presentation, he had been irritable and lethargic for about 2 weeks and had increased appetite, decreased concentration, and trouble falling asleep at night.

A once-gregarious family man, Mr. D had become apathetic and too tired to enjoy socializing. He denied suicidal thoughts or feelings of worthlessness and hopelessness but feared his fatigue was interfering with his job as a truck driver. He tired after driving only a few hours.

Mr. D had been diagnosed with sleep apnea when he was younger but had no other medical history. He said his erratic work schedule kept him from using his continuous positive airway pressure (CPAP) machine regularly. He was taking no medications and had not seen a primary care physician for more than 2 years because of lack of coverage. He denied past or current substance abuse.

The patient weighed 280 lbs at intake. His body mass index (BMI) was 37.5, indicating clinical obesity.

Because Mr. D lacked health insurance, we enrolled him 1 year ago in a free depression study at a psychiatric outpatient clinic. At intake, he said numerous life stresses—particularly the recent death of his brother in a motor vehicle accident—had left him feeling depressed.

We started Mr. D on citalopram, 20 mg/d, which was the study protocol. Two weeks later, he complained of dry mouth and sedation with minimal symptom improvement. We stopped citalopram and started sertraline, 25 mg/d.

Two weeks later, Mr. D again complained he had "no energy" and was "sleeping all day." We titrated sertraline to 200 mg/d over 2 months, but his excessive tiredness, increased appetite, and decreased motivation persisted. Mr. D needed routine laboratory tests, so we referred him to a local clinic that charges on a sliding scale. He did not complete the tests, however, for fear of incurring medical expenses.

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We tried to improve Mr. D's mood symptoms by adding lithium—225 mg/d titrated to 675 mg/d over 7 weeks—but his depression and fatigue kept worsening. We tapered him off lithium and sertraline and switched to the monoamine oxidase inhibitor tranylcypromine, 30 mg/d, which was also part of the study protocol. We warned him not to eat pizza, fermented dry sausages, or other foods that could interact adversely with tranylcypromine. After 4 weeks, Mr. D stopped taking the agent, saying he could not follow the dietary restrictions while on the road.

We released Mr. D from the study because of nonresponse. Bupropion, started at 100 mg bid and titrated to 300 mg each morning and 150 mg nightly across 5 months, did not resolve his fatigue. He also started having agitation and "anger problems," often getting into shouting matches over his CB radio with other truck drivers. We started quetiapine, 25 mg bid, hoping the low dose would calm his mood.

Until now, Mr. D has ignored our requests to undergo routine laboratory testing. We referred him to the local clinic four times over the past year but he has not complied, citing lack of health insurance and financial concerns.

Mr. D's symptoms suggest:

- **treatment-resistant depression**
- **an underlying medical problem**
- **a substance use disorder**

The authors' observations

Although Mr. D's symptoms (constantly depressed mood, loss of interest in usual activities) clearly suggest treatment-resistant major depressive disorder, an underlying medical disorder cannot be ruled out, yet he refuses to get needed tests.

Medical comorbidities are more prevalent in patients with mental illness than in the general population.[1] As many as 43% of patients referred to some psychiatry clinics have medical disorders, and almost one-half the diagnoses were missed by the referring physician.[2]

Compared to patients without psychiatric diagnoses, those with mental illness have more difficulty gaining access to medical care and are less likely to receive and follow guidelines for preventive care. Mental illness symptoms often compromise one's ability to seek health care or follow a doctor's orders. For example, a psychotic person may be overly suspicious of doctors, whereas someone with anxiety may seek care inappropriately.[3,4] Also, some studies estimate that 1 in 5 persons with mental illness are uninsured.[1,5,6]

Mr. D denies substance abuse, but primary care and behavioral health clinicians often miss substance use disorders.[7] Accuracy of substance abuse self-reports varies widely; some studies report high accuracy, whereas almost 33% of patients in other studies do not disclose substance abuse.[8]

How would you have handled this case?

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TESTING: STIMULATING FINDINGS

At his next visit, Mr. D reports worsening thirst and increased urination and complains of increased appetite, easy bruising, excessive sleepiness, and apathy. He also reveals that for 2 months he has been taking 2 to 3 fat-burning stimulant capsules a day to stay awake while driving.

Alarmed by his elevated blood pressure (177/99 mm Hg) and worsening physical symptoms, Mr. D finally consents to baseline laboratory testing. Blood glucose is 306 mg/dL (normal 70 to 110 mg/dL), and glycosylated hemoglobin is 12% (normal <5%).

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Urinalysis is positive for protein, glucose, and trace ketones. Blood pressure increases to 200/110 mm Hg.

Mr. D, who now weighs 270 lbs, is diagnosed as having hypertension and type 2 diabetes mellitus. Clinic doctors start him on metformin, 500 mg bid titrated to 1,000 mg bid, and glyburide, 5 mg/d, to control his glucose, and lisinopril, 10 mg /d, to control his hypertension, reduce cardiovascular risk, and preserve renal function. Clinicians also order Mr. D to follow an 1,800-calorie, American Diabetes Association-approved diet. We stop quetiapine and bupropion.

Mr. D's diabetes and hypertension diagnosis, combined with his habitus and history of easy bruising, suggest Cushing's syndrome. Doctors rule out this disorder based on a 24-hour free cortisol reading of 59 mg/L and normal dexamethasone suppression. Lab findings suggest he is not taking stimulants away from work.

Table 1

Medical symptoms that mimic depression

Symptom	Amphetamine withdrawal	Cushing's syndrome	Diabetes
Anxiety		x	
Dysphoric mood	x		
Fatigue	x	x	x
Hypersomnia	x		
Increased appetite	x		x
Insomnia	x		
Irritability		x	x
Muscle aches and cramps			x
Psychomotor retardation	x		
Vivid, unpleasant dreams	x		
Weakness		x	
Weight gain or loss			x

Ideally, when should Mr. D have been tested for diabetes or substance abuse?

- **at intake**
- **after 6 weeks of treatment resistance**
- **after 3 months**

The authors' observations

Ideally, Mr. D should have undergone laboratory testing after the initial intake visit, before psychotropics were started. Routine vital signs also should have been taken.

Symptoms of major depressive disorder and early type 2 diabetes are strikingly similar (*Table 1*). For example, early diabetes symptoms such as fatigue can mimic depression or other medical problems. In one study of 69 diabetic patients who were referred by their primary care doctors to a psychiatric clinic, 57 had not been diagnosed as having diabetes before referral.[9]

Aside from its medical complications, diabetes also doubles the risk of comorbid depression, which can alter diabetes' course and outcome.[10]

Earlier laboratory testing could have uncovered Mr. D's comorbid stimulant abuse, which also can mimic depression and complicate its treatment.[11] Signs of amphetamine withdrawal—

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Table 2

The cost of treating Mr. D's 'resistant depression'

Medication/dosage	Start date	Stop date	Approximate cost
Citalopram, 20 mg/d	10/3/03	10/24/03	$58.50
Sertraline, 25 to 200 mg/d	10/24/03	12/24/03	$283.00
Sertraline 150 mg/d, with lithium, 225 to 675 mg/d	12/24/03	2/6/04	$343.00
Tranylcypromine, 10 mg each morning, 20 mg at bedtime	2/27/04	4/20/04	$322.00
Bupropion (sustained release) up to 450 mg/d	5/7/04	8/30/04	$372.00
Bupropion (sustained release), 450 mg/d, plus quetiapine, 25 mg/d	8/30/04	11/8/04	$554.00
Total cost of psychotropics			$1,932.50
Total cost of office visits ($95 X 30 visits)			$2,850.00
TOTAL COST OF TREATMENT			**$4,782.50**

Source: Walgreens Co. retail prices in Wichita, KS

such as dysphoric mood, fatigue, insomnia or hypersomnia, increased appetite, and psychomotor retardation—can be mistaken for depression (*Table 1, page 77*).

Patients with Cushing's syndrome may present with nonspecific complaints of fatigue, decreased energy, apathy, depressed mood, and hypersomnia. A 24-hour free cortisol reading and dexamethasone suppression testing can differentiate Cushing's syndrome from depression.

Costly, unnecessary care. Missing a medical cause of apparent psychiatric symptoms can lead to unnecessary treatment and needless expense. A complete metabolic profile and urine drug screen—approximately $60—could have saved the nearly $5,000 spent on treating Mr. D's "resistant" depression (*Table 2*).

Psychiatrists need to watch for potential medical problems and for cormorbidities associated with mental illness. Patients with frequent mental distress—defined as ≥ 14 mentally unhealthy days within 30 days—were found to be more likely to smoke, drink heavily, and be physically inactive and obese than were mentally healthy persons. Mentally distressed patients also were more likely to lack health care coverage and to engage in multiple adverse behaviors, increasing their risk for mental and physical illness.[12]

Ensuring proper medical care. Based on our experience with Mr. D, routine vital signs—including BMI, weight, blood pressure, and pulse rate—should be recorded at each visit. At intake, we recommend that psychiatrists:

- find out when the patient last saw a primary health provider other than in the emergency room, and whether the patient is receiving preventive medical care
- assess for unhealthy lifestyle habits (smoking, drug use, poor diet) or family history of serious medical illnesses.

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Related resources

- WrongDiagnosis.com. Information on differential diagnosis of medical and psychiatric problems. www.wrongdiagnosis.com.
- Mauksch LB, Tucker SM, Katon WJ, et al. Mental illness, functional impairment, and patient preferences for collaborative care in an uninsured, primary care population. *J Fam Pract* 2001;50:41-7.
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DRUG BRAND NAMES

Bupropion • Wellbutrin
Citalopram • Celexa
Dexamethasone • Ciprodex, others
Glucophage • Metformin
Glyburide • DiaBeta, others
Lisinopril • Prinivil, Zestril
Lithium • Eskalith, others
Quetiapine • Seroquel
Sertraline • Zoloft
Tranylcypromine • Parnate

DISCLOSURE

Dr. Khan is a speaker for Wyeth Pharmaceuticals.
Dr. Grimsley reports no financial relationship with any company whose products are mentioned in this article or with manufacturers of competing products.

Mr. D, for example, had not received preventative care for at least 2 to 3 years and had obesity, a family history of diabetes, a sedentary lifestyle, and an unhealthy diet.

Educate patients about the interplay between physical and mental illness to help them understand the importance of seeing a primary care doctor. Finally, be familiar with local indigent health clinics and their fee scales.

Bottom Line

Initial symptoms of medical problems such as diabetes or substance abuse often mimic depression. Watch for underlying medical causes of depressive symptoms and risk factors for physical illness. Ask if patients are receiving preventive care, and educate them on the need to see a primary care physician.

FOLLOW-UP 30 LBS IN 4 MONTHS

Mr. D has lost >30 lbs over 4 months, and his blood pressure and serum glucose are normal. BMI is now 32, in the lower range of clinical obesity. He feels more energetic and active, no longer reports excessive sedation and apathy, and has stopped taking stimulants. His depressive symptoms have remitted.

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