

Medical problem or psychosis?

Abdominal pains are his complaint;
hallucinations are your concern

Distinguishing the cause of a patient's psychotic symptoms can be clinically challenging in a primary care practice. This case was submitted by Matthew Rosenberg, MD, who practices family medicine at Sacramento (CA) County Primary Care Clinic. This month's consultant is Bezael Dantz, MD. How would you have advised Dr. Rosenberg?

CASE: 'YOU'RE JUST GONNA DIE'

I was seeing Mr. J, age 31, weekly to monitor abdominal complaints. For 3 weeks he experienced increasing epigastric pain, and he had been evaluated twice in the emergency room for this complaint. Plain films, ultrasound, CT, and an elevated lipase reading suggested an inconclusive diagnosis of pancreatitis.

During his second office visit, Mr. J also complained of "hearing voices." Further questioning revealed that he had been hearing voices—often male—making degrading comments for several years. The voices have increased in frequency during his illness, and their negative comments include, "What do you have to live for?" and "You're just gonna die."

Mr. J blames the voices on distant drug use, claiming his parents "forced" him as a young teen to take hallucinogens. He often thinks he is being followed and does not trust others. He said both parents had mental illnesses but does not know the diagnoses or seriousness of their disorders.

His thoughts are well-organized with clear content. He shows no signs of depression or mania. He plays

guitar in a band and appears to be a thoughtful and high-functioning individual.

I need help with the differential diagnosis and suggestions of possible treatment options.

Dr. Dantz's consultation

The first step in evaluating psychosis is to determine whether it indicates a medical disorder, substance-induced disorder, or primary psychiatric illness. The chronicity and nature of Mr. J's psychotic symptoms (auditory hallucinations and paranoid delusions), his age, and a family history of psychiatric illness suggest a primary psychiatric disorder. The elevated lipase might explain his abdominal pain but is likely independent of his psychosis.

Medical workup. Conduct a comprehensive physical exam and medical and psychiatric history. Obtain collateral information from the family about the patient's psychiatric symptoms, family history, recreational drug use, and stressors. Acute onset, age >40, comorbid medical conditions, lack of acute psychosocial stressors, and a negative personal or family psychiatric history suggest a medical cause (*Table 1*).



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Table 1

Medical conditions that may present as psychosis

Type of condition	Examples
CNS infection	HIV, neurosyphilis, cryptococcosis, encephalitis, prion disease
Neoplasm	Primary or metastatic, paraneoplastic syndromes
Endocrinopathies	Thyroid, parathyroid, adrenal
Degenerative diseases	Alzheimer's disease, frontotemporal dementia, Huntington's disease, Parkinson's disease, Wilson's disease, Lewy body dementia
Demyelinating disorders	Multiple sclerosis, adrenoleukodystrophy
Metabolic disorders	Cirrhosis, vitamin deficiency, uremia, porphyria, heavy metal poisoning
Vasculitis	Systemic lupus erythematosus
Others	Seizures, migraine aura, hypnagogic and hypnopompic hallucinations, neurosarcoidosis

Many medications and idiosyncratic reactions can cause psychosis.¹ Review all agents the patient is taking—including over-the-counter, herbal, and prescription drugs—and especially note any drug started within 3 months before psychiatric symptom onset. (See “The skinny on one patient’s psychosis,” November 2005, at www.currentpsychiatry.com.) Also assess for use of alcohol, marijuana, hallucinogens, narcotics, stimulants, and inhalants. Until any drug has been stopped for at least 1 week, its contribution to psychosis may be unclear.

Lab testing. When signs or symptoms do not suggest an organic disease, laboratory tests have a low yield and are of questionable value.² In primary care practice, however, many psychotic patients complain of somatic symptoms. Given the devastating impact of psychotic illness, one can argue that even a yield <5% justifies a workup.

A urine toxicology screen is by far the most important lab test. CBC, comprehensive metabolic panel, thyroid function tests, erythrocyte sedimentation rate, and calcium level may reveal a medical cause. Consider HIV antibody and syphilis tests in at-risk individuals.

Findings on physical exam or abnormal lab results would guide further testing. Because of Mr. J’s GI and neurologic symptoms, a 24-hour urine test may be reasonable, particularly if he has had episodes of acute intermittent porphyria.

Neuroimaging. Consider a scan when psychosis is comorbid with:

- age >40
- neurologic complaints (such as headache, numbness, vertigo, seizures)
- focal neurologic findings (such as weakness, gait abnormality, clonus, or spasticity)
- confusion, cognitive deficit, history of malignancy
- head trauma
- immunocompromised state
- atypical psychotic symptoms (such as visual or olfactory hallucinations).

Psychiatric workup. If the history and physical exam reveal no organic basis, the next step is to determine the nature of this patient’s psychosis. The two most common psychiatric conditions associated with psychosis are:

- schizophrenic spectrum disorders (such as schizophreniform, schizophrenia)

Table 2

Differential diagnosis of primary psychosis: Typical features

	Affective disorder	Schizophrenic spectrum disorder
Symptom onset	Acute or subacute	Prolonged period (months to years) of self-neglect, social isolation, odd beliefs, eccentric behaviors
Course	Episodic, with periods of normal social and occupational functioning between episodes	Chronic, with exacerbations superimposed on gradually deteriorating social and occupational functioning
Associated symptoms	Mania (irritability, insomnia, rapid speech, labile mood, psychomotor agitation, racing thoughts) Depression (anhedonia, psychomotor retardation, sleep problems, poor appetite)	Flat or inappropriate affect, thought blocking, apathy

and schizoaffective disorder)

- affective disorders (such as psychotic depression and bipolar disorder).

Distinguishing among these conditions can be challenging (*Table 2*) because patients rarely present with typical syndromes.

For example, a bipolar patient may present in a mixed state with both depressive and manic features. Psychosis in schizophrenia may be brief (<6 months in schizophreniform disorder) and may be characterized by manic-like grandiose delusions or negative symptoms (flat affect, poverty of speech) that mimic affective symptoms. Finally, some patients have both an affective disorder and schizophrenia, as in schizoaffective disorder.

For Mr. J, years of uninterrupted hallucinations, longstanding paranoid delusions, and absence of prominent affective symptoms suggest schizophrenia. His hallucinations are typical of those reported in schizophrenia. Voices giving a running commentary on a person's thoughts and actions and derogatory comments are two of the most common auditory hallucinations.

Somatic concerns are also prominent in

schizophrenia. Patients may describe symptoms in bizarre terms, such as "electric shocks in my head" or "there's a fire in my spleen."

Supporting evidence for a schizophrenia diagnosis would include a history of social isolation, lack of interest in work, and poor social interaction. Mr. J has a supportive partner, and we are told he appears to be high-functioning and active as a guitarist in a band. These factors might support an alternate diagnosis of affective psychosis. Finally, his past drug use and somatic symptoms raise the possibility of active substance abuse.

Suicide risk. Ask psychotic patients if they think about harming themselves. Lifetime risk of suicide in schizophrenia is 10% to 15%, and rates in bipolar disorder are higher. If patients deny suicidality, ask them why. Reassuring responses include religious prohibition, hopefulness about the future, concern about suicide's effect on a loved one, fear of dying, or lack of means.

Candidates for emergent psychiatric consultation or hospitalization include patients with violent or homicidal thoughts and any patient who has attempted suicide, has a family history

Table 3

Starting an atypical antipsychotic* for primary psychosis

Drug	Starting and maintenance dosages ¹	Most-common adverse effects
Aripiprazole	7.5 to 15 mg daily; 15 to 30 mg daily	EPS (+), agitation (++)
Olanzapine	5 to 15 mg nightly; 10 to 20 mg nightly	Sedation (+++), weight gain (++++), hyperglycemia (++++), anticholinergic
Quetiapine	50 to 100 mg bid; 600 to 800 mg nightly	Sedation (++++), weight gain (+++), hyperglycemia (++)
Risperidone	0.5 to 2 mg bid; 2 to 4 mg bid	EPS (++), sedation (++) , weight gain (++) , hyperglycemia (++) , elevated prolactin
Ziprasidone	20 to 40 mg bid; 60 to 80 mg bid	EPS (+), agitation (++) , sedation (+) , QTc prolongation ²

EPS: Extrapyramidal symptoms

+ small risk ++ moderate risk +++ high risk ++++ most risk

* All atypical antipsychotics have been associated with rare cases of neuroleptic malignant syndrome. Tardive dyskinesia is estimated to occur in 0.5% of adults and 2.5% of geriatric patients for each year on therapy. FDA requires a warning on increased risks of hyperlipidemia, hyperglycemia, and diabetes mellitus on the labels of all atypical antipsychotics. Monitoring weight, glucose, and lipids is recommended.

¹ In clinical practice, dosages may be increased beyond maximum dosages listed. Doses may be given solely at night or bid, depending on sedation and agitation. Low dosages are recommended in geriatric patients or those with renal or hepatic disease. Review potential drug-drug interactions before dosing.

² Despite earlier concerns, no cases of torsade de pointes or sudden death have been reported with ziprasidone. Not recommended for patients with cardiac risk.

Source: Adapted from reference 4.

of suicide, has access to means, and lacks compelling reasons against suicide. Consider immediate psychiatric evaluation and admission of patients whose delusions or behaviors put them at risk for harm.

Abdominal pain workup. Although Mr. J's abdominal pain may be functional, also seek an organic cause. His first-time disclosure of psychotic symptoms suggests that a serious medical stressor may be exacerbating a chronic psychiatric illness. Because the elevated lipase may indicate pancreatitis, consider an endoscopic or MRI examination of the pancreas and bile ducts. In consultation with a gastroenterologist, evaluate other causes such as peptic ulcer disease, ischemic bowel (perhaps as a result of cocaine use), inflammatory bowel disease, vasculitis, porphyria, and abdominal migraine.

MANAGING PSYCHOSIS

Psychiatric consultation is strongly recommended for patients beginning therapy for psychotic disorders who have shown a particularly high risk for suicide. Uncontrolled symptoms, unanticipated psychiatric side effects, and the humiliation that results from the insight gained through treatment may contribute to this risk.

Assuming that Mr. J does not meet criteria for acute psychiatric hospitalization, the primary care clinician can stabilize the psychotic symptoms while awaiting psychiatric referral. Any atypical antipsychotic would be appropriate (Table 3).

Patients who refuse treatment pose a quandary. If the patient is not acutely ill, try to establish an alliance over several visits rather than endangering the therapeutic relationship through con-

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frontation or overzealous persuasion (*Table 4*).

Monitoring. The primary care physician's role after the patient begins antipsychotic therapy is to:

- assess his or her symptoms (particularly suicidality) and adherence to psychiatric visits and treatment
- monitor for adverse effects from medications.

Atypical antipsychotics have been associated with weight gain, hyperglycemia, and hyperlipidemia. Check fasting glucose and lipids quarterly for the first year of antipsychotic therapy and annually thereafter.⁵ Watch for drug-drug interactions whenever a new medication is added. Monitor for abnormal movements, even though the risk of extrapyramidal symptoms and tardive dyskinesia is lower with atypical antipsychotics than with traditional agents.

For Mr. J's psychiatric symptoms, I would:

- assess his willingness to start medication to reduce or eliminate the voices
- suggest he accept psychiatric referral
- assure him that I will remain involved in his care and continue to evaluate his abdominal symptoms.

I would also request permission to discuss his case with his partner and a family member to gather pertinent history and enlist their support for treatment. I would then start Mr. J on any drug listed in *Table 3*.

References

1. The Medical Letter. Drugs that may cause psychiatric symptoms July 8, 2002;1134:59-62.
2. Anfinson TJ, Kathol RG. Screening laboratory evaluation in psychiatric patients: a review. *Gen Hosp Psychiatry* 1992;14(4):248-57.
3. Mann JJ. A current perspective of suicide and attempted suicide. *Ann Intern Med* 2002;136(4):302-11.
4. McIntyre RS, Konarski JZ. Tolerability profiles of atypical antipsychotics in the treatment of bipolar disorder. *J Clin Psychiatry* 2005;66(suppl 3):28-36.
5. Kane JM, Leucht S, Carpenter D, Docherty JP Expert consensus guideline series. Optimizing pharmacologic treatment of psychotic disorders. Introduction: methods, commentary, and summary. *J Clin Psychiatry* 2003;64(suppl 12):5-19.

Table 4

Strategies to build a therapeutic alliance with psychotic patients

Enlist support of the patient's family or loved ones

Do not argue with the patient's delusions

Focus on what is bothering the patient most, and treat identified symptoms

Refer to the "stress" the patient suffers because of the unusual experiences he is describing

Commiserate with the anxiety he feels when others (such as his family) ridicule or reject his beliefs

Describe the medication as a "tranquilizer" rather than an antipsychotic. Use terms such as "nerves," "stress," "depression," "anxiety," or "insomnia," which are often preferred by psychotic patients

Normalize treatment by suggesting "many of my patients with fatigue or lack of sleep find this medication very helpful"

Use medical terms to destigmatize the illness. Suggest that the patient suffers from a chemical disturbance that can be treated, similar to patients with diabetes who require insulin