Delusional and aggressive, while playing the lottery

Muhammad Rehan Puri, MD, MPH, and Suhey Franco, MD

Mr. P, age 78, only sleeps a few hours a day, is delusional, and is verbally and physically aggressive toward his wife. He does not have a psychiatric history. How would you evaluate him?

CASE Delusional and aggressive

Mr. P, age 78, of Filipino heritage, is brought to the psychiatric hospital because he has been verbally aggressive toward his wife for several weeks. He has no history of a psychiatric diagnosis or inpatient psychiatric hospitalization, and no history of taking any psychotropic medications.

According to his wife, Mr. P has been ruminating about his father, who died in World War II, saying that "the Japanese never gave his body back" to him. Also, his wife describes 3 weeks of physically aggressive behavior, such as throwing punches; the last episode was 2 days before admission.

Mr. P is not bathing, eating, taking his medications, and attending to his activities of daily living. He sleeps for only 1 to 2 hours a night; is irritable and easily distractible; and experiences flight of ideas. Mr. P has been buying lottery tickets, telling his daughter that he will become a millionaire and then buy a house in the Philippines.

Mr. P reports depressed mood, but no other depressive symptoms are present. He reports no suicidal or homicidal ideations, auditory or visual hallucinations, or anxiety symptoms. He has no history of substance abuse.

What diagnosis would you give Mr. P?

a) late-onset bipolar disorder
b) Alzheimer's disease
c) major depressive disorder
d) frontotemporal dementia

The authors' observations

Bipolar disorder in later life is a complex and confounding neuropsychiatric syndrome with diagnostic and therapeutic challenges. The disorder can affect people of all ages and is not uncommon among geriatric patients, with a 1-year prevalence in United States of 0.4%.[1] In one study, 10% of new bipolar disorder cases were found to occur after age 50.[2] As the American population grows older, the number of bipolar disorder cases among seniors is expected to increase.[3]

It was once thought that symptoms of bipolar disorder disappear with age; newer research has disproved this theory, and proposes that untreated bipolar disorder worsens over time.[4] Persons who are given the diagnosis later in life could have had bipolar disorder for decades, but symptoms became more noticeable and problematic with age.[5]

continued on page 24

Dr. Puri is third-year resident and Dr. Franco is second-year resident, Bergen Regional Medical Center, Paramus, New Jersey.

Disclosures
The authors report no financial relationships with any company whose products are mentioned in this article or with manufacturers of competing products.

How would you handle this case?

Answer the challenge questions throughout this article

continued from page 17

Common symptoms in geriatric patients can differ from what we might expect in younger patients: agitation, hyperactivity, irritability, confusion, and psychosis.[6] When the disorder presents in patients age >60, it can be severe, with significant changes in cognitive function, including difficulties with memory, perception, judgment, and problem-solving.[7,8]

Clinical Point

In geriatric patients, bipolar disorder can present with changes in cognitive function, including memory, perception, judgment, and problem-solving

HISTORY Medical comorbidities

Mr. P emigrated from the Philippines 20 years ago, is married, and lives with his wife. He has 3 brothers; his parents were divorced, and his mother remarried. Mr. P completed high school.

Mr. P has an extensive medical history: diabetes mellitus, hypertension, dyslipidemia, and recent double coronary artery bypass grafting. He is taking several medications: sitagliptin, 25 mg/d; pantoprazole, 5 mg/d; metformin, 1,000 mg/d; rivaroxaban, 20 mg/d; amiodarone, 200 mg/d; metoprolol, 12.5 mg/d; olmesartan medoxomil, 40 mg/d; aspirin, 81 mg/d; simvastatin, 10 mg/d; eszopiclone, 3 mg at bedtime; and amlodipine, 5 mg at bedtime.

Mr. P was following up with his primary care physician for his medical conditions and was adherent with treatment until 1 week before he was admitted to our facility.

The authors' observations

Always rule out medical causes in a case of new-onset mania, which is particularly important in geriatric patients. Older patients with new-onset mania are more than twice as likely to have a comorbid neurologic disorder.[9] Neurologic causes of late-onset mania include:

- stroke
- tumor
- epilepsy
- Huntington's disease and other movement disorders
- multiple sclerosis and other white-matter diseases
- head trauma
- infection (such as neurosyphilis)
- Creutzfeldt-Jakob disease
- frontotemporal dementia.[10]

Mr. P's presentation of psychomotor agitation, impaired functioning, decreased need for sleep, increased energy, hyperverbal speech, and complex paranoid delusions meets DSM-5 criteria for bipolar disorder, manic phase. In addition, older manic patients frequently present with confusion, disorientation, and distractibility. Younger patients with mania often present with euphoric moods and grandiosity; in contrast, geriatric patients are more likely to show a mixture of depressed affect and manic symptoms (pressured speech and a decreased need for sleep).[11-15]

We considered an emerging neurodegenerative process, because dementia can present early with disinhibition, lability, and other behavioral disturbances, including classic manic syndromes.[16] Although we could not fully rule out a neurodegenerative process in the initial phase of treatment, Mr. P's longitudinal course demonstrated no change in baseline cognitive function and no evidence of subsequent decline, making dementia unlikely.[17]

Patients with frontotemporal dementia are more likely to present initially to a psychiatrist than to a neurologist.[18] Frontotemporal dementia is a progressive neurodegenerative disease that affects the frontal and temporal cortices; it is a common cause of dementia in patients age <65.[19] Frontotemporal dementia is characterized by insidious behavioral and personality changes; often, the initial presentation lacks any clear neurologic signs or symptoms. Key features include apathy, disinhibition, loss of sympathy and empathy, repetitive motor behaviors, and overeating.[20]

Mr. P's symptoms stabilized with divalproex sprinkles and risperidone. There was no evidence of decline in memory, social interaction, or behavior.

Discuss this article at www.facebook.com/CurrentPsychiatry

EVALUATION Paranoia

On mental status exam, Mr. P has an appropriate appearance; he is clean and shaven, with good eye contact. Muscular tone and gait are within normal limits. Level of activity is increased; he exhibits psychomotor agitation. Speech is rapid, over-productive, and loud; thought process shows flight of ideas, and thought associations are circumstantial.

Mr. P has paranoid delusions about the staff trying to hurt him. His judgment is poor, evidenced by an inability to take care of himself. Insight is minimal, as seen by noncompliance with treatment. Mr. P is oriented only to person and place. His mood is anxious; affect is labile.

Complete blood count, comprehensive metabolic profile, blood alcohol level, urine analysis, urine toxicology, electrocardiogram, and CT scan of the head are within normal limits.

Mr. P is given a diagnosis of mood disorder due to general medical condition, psychotic disorder due to general medical condition. The team rules out acute delirium, bipolar I disorder, and neurodegenerative disorders such as frontotemporal dementia.

Mr. P is maintained on pre-admission medications for his medical conditions. A mood stabilizer, divalproex sprinkles, 250 mg/d, is added.

Once on the unit, Mr. P is re-evaluated. Divalproex is increased to 500 mg/d; risperidone, 0.5 mg/d, is added to address paranoia. Mr. P also receives group and individual psychotherapy. He does not participate in neuropsychological testing, and no single-photon emission CT analysis is done. Mr. P remains in the hospital for 2 weeks. After a family meeting, his daughter says she feels comfortable taking Mr. P home. He follows up in the outpatient clinic and is doing well.

The authors' observations

Treating geriatric patients with bipolar disorder requires attention to several factors (***Table***). Older patients might tolerate or metabolize medications differently than younger adults, and therefore may need a different dosage. Older patients are more likely to have comorbid medical conditions and to be taking medications for those ailments. Treatment is much more complicated for this age group because physicians need to account for possible drug-drug interactions.[21]

A number of medications can be helpful in treating older patients who have bipolar disorder.[11] Ongoing research compares lithium with anticonvulsants in older bipolar disorder patients to determine which drug has the greatest benefit with the lowest risk of side effects.

Psychotherapy can be a valuable addition to pharmacotherapy in older adults. Some psychotherapy programs are specifically geared to older bipolar disorder patients.[22,23]

Table

How to manage an acutely manic geriatric patient

Assess • History • Physical examination • Routine laboratory tests such as complete blood count, basic metabolic profile, liver function tests, urine analysis, serum levels of medications
Determine whether hospitalization is necessary
Begin therapy with a mood stabilizer
Provide treatment for symptoms • Agitation, insomnia: benzodiazepine (eg, lorazepam, 0.5 to 1.0 mg/d) • Hallucinations, delusions: antipsychotic medication (eg, risperidone, 0.5 to 1.0 mg/d; olanzapine, 2.5 to 5 mg/d)
Establish and maintain a therapeutic alliance
Involve family and friends in care
Consider maintenance therapy after the patient is stabilized

Use of divalproex sodium in older patients

First, perform baseline laboratory tests: complete blood count, liver function, and

Clinical Point

Treating bipolar disorder among older patients is complicated because clinicians need to account for possible drug-drug interactions

Clinical Point

Psychotherapy can be a valuable addition to pharmacotherapy in older adults; some programs are specifically geared to older bipolar patients

Related Resources

- Sajatovic M, Forester BP, Gildengers A, et al. Aging changes and medical complexity in late-life bipolar disorder: emerging research findings that may help advance care. Neuropsychiatry (London). 2013;3(6):621-633.
- Dols A, Rhebergen D, Beekman A, et al. Psychiatric and medical comorbidities: results from a bipolar elderly cohort study. Am J Geriatr Psychiatry. 2014;22(11):1066-1074.

Drug Brand Names

Amiodarone • Cordarone
Amlodipine • Norvasc
Divalproex sodium • Depakote
Eszopiclone • Lunesta
Lithium • Eskalith, Lithobid
Lorazepam • Ativan
Metformin • Glucophage
Metoprolol • Lopressor
Olanzapine • Zyprexa
Olmesartan medoxomil • Benicar
Pantoprazole • Protonix
Risperidone • Risperdal
Rivaroxaban • Xarelto
Simvastatin • Zocor
Sitagliptin • Januvia

electrocardiogram. Initiate divalproex sodium, 250 mg at bedtime, increasing the dosage every 3 to 5 days by 250 mg, with a target dose of 500 to 2,000 mg/d (divided into 2 or 3 doses). Monitor serum levels; levels of 29 to 100 µg/mL are effective and well tolerated. Common side effects include excess sedation, ataxia, tremor, nausea, and, rarely, hepatotoxicity, leukopenia, and thrombocytopenia.[24]

Use of lithium in geriatric patients

First, perform baseline laboratory tests: electrolytes, creatinine, blood urea nitrogen, urine, thyroid stimulating hormone, and electrocardiogram. Starting dosage is 300 mg at bedtime (150 mg for frail cachectic patients). Monitor serum levels 12 hours after last dose, adjusting dosage every 5 days until a target serum level of 0.5 to 0.8 mEq/L is reached. Common dosages for geriatric patients are 300 to 600 mg/d, which often can be given as a single bedtime dose. Cautions: When using lithium with a thiazide diuretic or nonsteroidal anti-inflammatory drug, watch for dehydration, vomiting, and diarrhea, which will elevate the serum lithium level. Side effects include ataxia, tremor, urinary frequency, thirst, nausea, diarrhea, hypothyroidism, and exacerbation of psoriasis. Once stabilized, monitor the serum lithium level, thyroid-stimulating hormone, and kidney function every 3 to 6 months.[24]

References

1. Weissman MM, Leaf PJ, Tischler GL, et al. Affective disorders in five United States communities. Psychol Med. 1988;18(1):141-153.
2. Yassa R, Nair NP, Iskandar H. Late-onset bipolar disorder. Psychiatr Clin North Am. 1988;11(1):117-131.
3. Verdoux H, Bourgeois M. Secondary mania caused by cerebral organic pathology [in French]. Ann Med Psychol (Paris). 1995;153(3):161-168.
4. Fadden G, Bebbington P, Kuipers L. The burden of care: the impact of functional psychiatric illness in the patient's family. Br J Psychiatry. 1987;150:285-292.
5. Yassa R, Nair V, Nastase C, et al. Prevalence of bipolar disorder in a psychogeriatric population. J Affect Disord. 1988;14(3):197-201.
6. Robinson RG, Boston JD, Starkstein SE, et al. Comparison of mania with depression following brain injury: casual factors. Am J Psychiatry. 1988;145(2):172-178.
7. Starkstein SE, Boston JD, Robinson RG. Mechanisms of mania after brain injury: 12 case reports and review of the literature. J Nerv Ment Dis. 1988;176(2):87-100.
8. Herrmann N, Bremner KE, Naranjo CA. Pharmacotherapy of late life mood disorders. Clin Neurosci. 1997;4(1):41-47.
9. Tohen M, Shulman KI, Satlin A. First-episode mania in late life. Am J Psychiatry. 1994;151(1):130-132.
10. Mendez MF. Mania in neurologic disorders. Curr Psychiatry Rep. 2000;2(5):440-445.
11. Eagles JM, Whalley LJ. Aging and affective disorders: the age at first onset of affective disorders in Scotland, 1969-1978. Br J Psychiatry. 1985;147:180-187.
12. Snowdon J. A retrospective case-note study of bipolar disorder in old age. Br J Psychiatry. 1991;158:485-490.

Bottom Line

In geriatric patients, bipolar disorder can present with agitation, irritability, confusion, and psychosis, rather than euphoric mood and grandiosity. When you suspect bipolar disorder in an older patient, first rule out medical causes of symptoms. When selecting treatment, consider comorbid medical conditions and possible drug-drug interactions.

13. Winokur G. The Iowa 500: heterogeneity and course in manic-depressive illness (bipolar). Compr Psychiatry. 1975;16(2):125-131.
14. Shulman K, Post F. Bipolar affective disorder in old age. Br J Psychiatry. 1980;136:26-32.
15. Young RC, Falk JR. Age, manic psychopathology, and treatment response. Int J Geriatr Psychiatry. 1989;4(2):73-78.
16. Almeida OP. Bipolar disorder with late onset: an organic variety of mood disorder [in Portuguese]? Rev Bras Psiquiatr. 2004;26(suppl 3):27-30.
17. Carlino AR, Stinnett JL, Kim DR. New onset of bipolar disorder in late life. Psychosomatics. 2013;54(1):94-97.
18. Woolley JD, Wilson MR, Hung E, et al. Frontotemporal dementia and mania. Am J Psychiatry. 2007;164(12):1811-1816.
19. Ratnavalli E, Brayne C, Dawson K, et al. The prevalence of frontotemporal dementia. Neurology. 2002;58(11):1615-1621.
20. Gregory CA, Hodges JR. Clinical features of frontal lobe dementia in comparison to Alzheimer's disease. J Neural Transm Suppl. 1996;47:103-123.
21. Broadhead J, Jacoby R. Mania in old age: a first prospective study. Int J Geriatr Psychiatry. 1990;5(4):215-222.
22. Dhingra U, Rabins PV. Mania in the elderly: a 5-7 year follow-up. J Am Geriatr Soc. 1991;39(6):581-583.
23. Shulman KI. Neurologic comorbidity and mania in old age. Clin Neurosci. 1997;4(1):37-40.
24. Shulman KI, Herrmann N. Bipolar disorder in old age. Can Fam Physician. 1999;45:1229-1237.

Clinical Point

When using lithium with a thiazide diuretic or NSAID, watch for dehydration, vomiting, and diarrhea, which will elevate the serum lithium level