The patient who didn't know

Neha Jain, MD, and Veena Bhanot, MD

How would you handle this case?

Visit **CurrentPsychiatry**.com to input your answers and see how your colleagues responded Mrs. A was successfully treated for psychotic symptoms, but she answers all questions with, 'I don't know.' What could be limiting her speech?

CASE Unable to communicate

Mrs. A, age 44, is airlifted to the emergency room after a motor vehicle accident in which she was the restrained front seat passenger. She was on the way to a mental health follow-up appointment with her husband, who died on the scene, and 24-year-old son, who sustained multiple injuries. At the accident scene, Mrs. A was awake and responded to all questions by saying, "I don't know." No other history could be obtained. She was carrying documents from a local psychiatric facility that stated she had been discharged 1 month ago with a diagnosis of psychotic disorder, not otherwise specified (NOS). Her discharge medications were olanzapine, 15 mg at bedtime; escitalopram, 20 mg/d; lamotrigine, 100 mg/d; zolpidem, 10 mg as needed at bedtime; and diazepam, 5 mg tid.

Initial assessment reveals mild concussion, nondisplaced fractures of the left C7 and T1 transverse processes, and fracture of the posterior left first rib. Mrs. A is admitted to the trauma surgery service. Soon after, nurses report that Mrs. A is not able to report symptoms. Psychiatry service is consulted to evaluate her continued confusion and inability to communicate.

What could be causing Mrs. A's symptoms?

a) concussion syndrome b) psychosis c) acute stress disorder d) depression

a The authors' observations

I (NJ) first see Mrs. A in the trauma stepdown unit. She is lying in bed with a cervical collar and looks older than her stated age. As soon as I enter the room, Mrs. A greets me with "I don't know." She is awake, alert, and appears to listen to all questions, but responds only with "I don't know." She is able to follow simple commands to squeeze my fingers and move her extremities.

Mrs. A seems anxious because of my repeated attempts to communicate. Her affect is restricted, and her speech is limited to "I don't know" but fluent. She does not appear to be responding to internal stimuli. Neurologic examination, including cranial nerves and reflexes, is normal. A chart review reveals that her psychiatric medications have been continued upon admission.

HISTORY Always nervous

We contact Mrs. A's son, who also was admitted to the hospital, for more information. He reports that his mother has a long history of "nerve problems," which he describes as "crying and feeling sad and nervous." He says Mrs. A's mother also had these problems, and Mrs.

Dr. Jain is a third-year psychiatry resident and Dr. Bhanot is associate professor, department of behavioral medicine and psychiatry, Charleston Area Medical Center, West Virginia University, Charleston.

Table 1

Mrs. A's family and personal history of 'nerve problems'

Childhood	Mrs. A's mother had 'nerve problems.' Her father physically abused Mrs. A. She received a ninth-grade education
Adult life	Married at age 17, Mrs. A had her first child at age 19, second child at age 20, and third child at age 21. She never obtained employment but raised her children with her husband
Last 2 years	Mrs. A lived in a trailer next to the house where her husband lived with 2 of their children. Family reports Mrs. A's 'nerve problems' were the reason for the separation. They state they took care of her needs and made sure she took her medications
Last 2 months	Mrs. A was admitted to a local psychiatric facility with confusion, hallucinations, crying spells, and decreased speech. After discharge, she could perform activities of daily living, but her speech did not improve
Present	Mrs. A is a passenger in a motor vehicle accident that results in her husband's death and multiple injuries to her son. She is admitted to our hospital

A's childhood was difficult (*Table 1*). Because of this condition, Mrs. A lives alone in a trailer next to the house where her husband and children live.

Mrs. A's son said that she had a "nervous breakdown" a few months ago, was admitted to the local psychiatric facility, and since then had been saying only, "I don't know." She can communicate her wishes by pointing at "Yes" or "No" written on paper. At home, she can perform all activities of daily living (ADLs), including paying bills. He denies that his mother engages in drug abuse.

We obtain Mrs. A's treatment records from the psychiatric facility and learn she was admitted with a history of confusion, auditory and visual hallucinations, and crying episodes. She had a history of noncompliance with outpatient medications, which included diazepam, duloxetine, and ziprasidone. Upon admission to that facility, Mrs. A was alert but disoriented to place and time. She answered questions slowly but was brief, sometimes incoherent, and having auditory and visual hallucinations.

During that hospitalization, clinicians established a working diagnosis of psychotic disorder, NOS. Mrs. A was noted to have a urinary tract infection, which they treated with amoxicillin/clavulanate. Ziprasidone was discontinued and olanzapine was started. Escitalopram and lamotrigine were added. Mrs. A's hallucinations gradually resolved, and she was able to perform ADLs. However, she did not communicate much and started answering most questions with "I don't know." At discharge, she was sent home to the care of her sister and husband.

Since then, Mrs. A had been taking her medications regularly but did not show improvement in her speech or methods of communication.

Given this background, what diagnostic tests would you order?

- a) brain MRI
- b) electroencephalography (EEG)
- c) speech evaluation
- d) all of the above

The authors' observations

Aphasia and related language disorders may present as a manifestation of stroke,¹ head injury,² status epilepticus,³ cerebral tumors,⁴ or neurodegenerative diseases.⁵ Language disorders commonly seen in psychiatric patients include selective mutism and aphonia. There is limited literature on aphasia as a manifestation of psychiatric illnesses; an extensive search reveals only 3 studies.⁶ We found case reports highlighting

Clinical Point

Language disorders may present as a manifestation of stroke, head injury, cerebral tumors, or other conditions

Table 2

What is the cause of Mrs. A's speech difficulties?

Possible diagnosis	Finding that ruled it out
Primary progressive aphasia	Subacute onset with rapid progression
Frontotemporal dementia	Inconclusive mild frontotemporal atrophy on brain MRI
Nonconvulsive status epilepticus	Normal EEG
Conversion disorder	Uncommon presentation: Mrs. A is beyond usual age of onset, and symptoms have lasted >1 month
Broca's aphasia/CVA	No corresponding organic lesions on MRI
Factitious disorder	No motivation to assume the sick role
Psychotic speech	No other evidence of psychosis

CVA: cerebrovascular accident; EEG: electroencephalography; MRI: magnetic resonance imaging

Neuroimaging

studies can help differentiate language disorders from psychosis

Clinical Point

Findings of Mrs. A's neurologic testing

Test	Result	
Head CT	1-cm dural-based lesion in the left posterior parietal region	
Brain MRI	Mild, inconclusive frontotemporal atrophy	
EEG	Normal	
CT: computed tomography; EEG: electroencephalography;		

MRI: magnetic resonance imaging

the difficulty in establishing a differential diagnosis among schizophrenic speech and status epilepticus⁷ and frontotemporal⁸ and stroke-related⁹ speech disorder. Neuroimaging studies may be helpful in differentiating language disorders from psychosis. For example, evidence of lesions in the language centers of the brain is found in some cases of aphasia, and enlarged ventricles is a common finding in patients with schizophrenia. We considered all of these possibilities when evaluating Mrs. A (*Table 2*).

TREATMENT An abbreviated stay

A week after admission, Mrs. A is deemed medically stable. Head CT reveals a small, calcified left parietal meningioma that did not correlate with her symptoms (*Table 3*). Brain MRI shows mild frontotemporal atrophy that was

considered inconclusive evidence for a diagnosis of frontotemporal dementia; there is no evidence of infarction, tumors, or other enhancing lesions that may have explained Mrs. A's symptoms. A 12-lead EEG shows no abnormalities, which rules out a seizure disorder.

Neurology consult rules out concussion syndrome. Over several different evaluations, Mrs. A is noted to follow commands, perform ADLs, and walk. She is able to write her name legibly but is unable to write anything else or to perform a clock-drawing test.

A speech pathology evaluation is requested. A speech pathologist diagnoses Mrs. A with expressive aphasia—impaired ability to speak and write—with some receptive component, meaning her ability to comprehend spoken words also is impaired.

Mrs. A's speech status does not change, and she remains unable to communicate. She is discharged 10 days after admission with scheduled outpatient follow-up.

What diagnostic tests would you like to perform at outpatient follow-up?

- a) neuropsychological testing
- b) positron emission tomography (PET) scan
- c) follow-up MRI every 3 months
- d) no further tests are needed

The authors' observations

At discharge, it seemed likely that Mrs. A may have early symptoms of a neurode-

generative illness, such as frontotemporal dementia, or the aphasia may be a manifestation of chronic psychotic depression. We wanted to follow up with neuropsychological testing and PET scan before establishing a definitive psychiatric diagnosis and modifying the treatment plan.

Unfortunately, Mrs. A was lost to followup. We contacted her family several times, but they were unable to bring her back for further evaluation because of financial issues and the distance they would have had to travel.

References

- Jodzio K, Gasecki D, Drumm DA, et al. Neuroanatomical correlates of the post-stroke aphasias studied with cerebral blood flow SPECT scanning. Med Sci Monit. 2003;9(3):MT32-41.
- Stein M, Cantrell SB. Nonfluent aphasia after closed head trauma: report of a case. J Oral Maxillofac Surg. 1999;57(6):745-748.
- Piñol-Ripoll G, Pérez-Lázaro C, Beltrán-Marín I, et al. Aphasia as the sole symptom of partial status epilepticus [in Spanish]. Rev Neurol. 2004;39(11):1096-1097.
- Balafouta MJ, Kouvaris JR, Miliadou AC, et al. Primitive neuroectodermal tumour in a 60-year-old man: a case report and literature review. Br J Radiol. 2003;76(901):62-65.

Related Resources

- The Academy of Aphasia. www.academyofaphasia.org.
- The National Aphasia Association. www.aphasia.org.

Drug Brand Names

Amoxicillin/clavulanate •	Lamotrigine • Lamictal
Augmentin	Olanzapine • Zyprexa
Diazepam • Valium	Ziprasidone • Geodon
Duloxetine • Cymbalta	Zolpidem • Ambien
Escitalopram • Lexapro	

Disclosure

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

- Kuramoto S, Hirano T, Uyama E, et al. A case of slowly progressive aphasia accompanied with auditory agnosia [in Japanese]. Rinsho Shinkeigaku. 2002;42(4):299-303.
- Bulandra R, Medvighi O, Ninosu N. Aphasia or psychotic speech (discussion of a case) [in Romanian]. Neurol Psihiatr Neurochir. 1970;15(6):553-558.
- Lawson B, Quintana JC. Non convulsive status epilepticus: an heterogeneous disease with a difficult diagnosis. Report of 2 cases with unusual presentation [in Spanish]. Rev Med Chil. 2003;131(9):1045-1050.
- Vanderzeypen F, Bier JC, Genevrois C, et al. Frontal dementia or dementia praecox? A case report of a psychotic disorder with a severe decline [in French]. Encephale. 2003;29(2):172-180.
- Sambunaris A, Hyde TM. Stroke-related aphasias mistaken for psychotic speech: two case reports. J Geriatr Psychiatry Neurol. 1994;7(3):144-147.

Clinical Point

Mrs. A's aphasia might be an early symptom of a neurodegenerative illness such as frontotemporal dementia

Bottom Line

Expressive aphasia in the inpatient setting presents diagnostic and therapeutic challenges. When evaluating a patient with communication problems, be vigilant for illnesses that may present with aphasia as the sole symptom, such as stroke, head injury, status epilepticus, cerebral tumors, or neurodegenerative diseases.