Case Report

When Functional Neurological Symptom Disorder Isn't Functional: A Case Report of Basal Ganglia Infarct Mimicking Psychiatric Illness

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ABSTRACT:

Functional neurological symptom disorder, also known as "conversion disorder," is a common source of disability in medicine. Patients have often been misdiagnosed, correctly diagnosed after lengthy delays, and/or subjected to poorly delivered diagnoses that prevent diagnostic understanding and lead to inappropriate treatments, iatrogenic harm, unnecessary and costly evaluations, and poor outcomes.

A 45-year-old female presented with sudden onset muteness, generalized weakness, and excessive daytime somnolence, initially suggesting a diagnosis of conversion disorder. However, an MRI scan revealed an acute infarct in the right basal ganglia and a small infarct in the left gangliocapsular region, indicating a vascular infarct as the underlying cause. This case highlights the importance of considering neurological examination in patients presenting with unusual symptoms, duration, and treatment response, to avoid misdiagnosis and provide accurate treatment. It also emphasizes the complex interplay between psychological and neurological factors in patients presenting with unusual symptoms.

KEY WORDS: Conversion disorder; Basal ganglia infarct; Stroke mimics

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INTRODUCTION:

Conversion disorder consists of neurological symptoms affecting sensory or motor function that are inconsistent with known neurological/medical conditions. These symptoms typically appear suddenly and may include coordination, balance, cognitive deficits, or postural abnormalities. The onset, exacerbation, or maintenance of symptoms are commonly attributed to mental factors, such as stress or trauma in a general sense. The disorder tends to appear between late childhood and early adulthood and is more common among women.[1,2] Though sudden-onset behavioral symptoms following clear precipitating events suggest psychiatric diagnoses, striatal lesions can manifest with aphasia, apathy, and flat affect—mimicking psychiatric conditions. Thorough neurological assessment remains crucial for accurate diagnosis despite apparent psychiatric presentation.

CASE REPORT:

A 45-year-old diabetic female from a rural background presented to our hospital with a distinctive clinical presentation characterized by symptoms that were abrupt in onset and showed progressive worsening over time. She had been under significant stress due to her participation in local political activities. Family members reported that immediately before her symptoms appeared, she received disturbing news that police might raid her home for alleged election misconduct.

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Family reported that after receiving distressing news during her local campaign activities, she became abruptly mute and unresponsive, stopped engaging in conversation or household tasks, and displayed increased sleep patterns. Despite these symptoms, she maintained adequate self-care and grooming.

Two days after symptom onset, the family consulted a local psychiatrist who prescribed risperidone 2mg BID, clonazepam 0.25mg BID, and lorazepam 2mg at bedtime. After four days without improvement, they brought her to our outpatient department with a 6-day history of sudden-onset muteness, generalized weakness, and somnolence.

A general physical and systemic examination revealed no gross abnormalities. Her vital signs were within normal limits: blood pressure 110/70 mmHg, pulse rate 90/min, and oxygen saturation 98% at room air. There was no evidence of pallor, icterus, cyanosis, clubbing, or lymphadenopathy.

A mental status examination revealed that the patient was conscious and cooperative but not communicative. She was well-clad and kempt, covering her head properly according to cultural norms. There were no abnormalities in her gait, posture, or gestures, and eye contact was initiated but not maintained. The patient did not respond to mood assessment, and her affect was blunt. Thought, perception, and cognitive functions could not be assessed due to the patient's lack of communication.

A brief neurological examination revealed no spontaneous abnormal movements or gait abnormalities. Plantars were bilateral mute, and there was no evidence of rigidity or spasticity. Based on history and mental status assessment, acute psychosis and conversion disorder were considered as differentials and therefore was started on escitalopram 5mg twice daily, clonazepam 0.25mg twice daily and if necessary.

Alongwith treatment, the MRI brain was also ordered to rule out neurological causes. The MRI revealed an acute infarct in the right basal ganglia and a small infarct in the left gangliocapsular region (Figure 1), indicating a vascular infarct as the underlying cause of her symptoms.

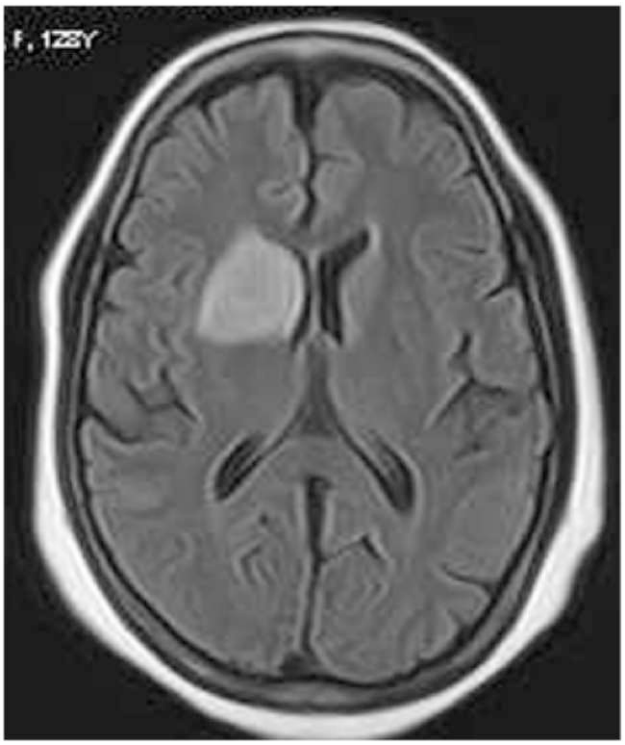

Figure 1: MRI brain showing basal ganglia infarct

DISCUSSION:

This case emphasizes a critical clinical lesson: vascular pathology can convincingly mimic psychiatric presentations. The patient presented with sudden mutism, generalized weakness, and excessive somnolence following election-related stress—a presentation initially attributed to conversion disorder or acute psychosis.

Conversion disorder appeared to be a reasonable working diagnosis, especially considering the temporal relationship with psychological stress. The critical turning point came when neuroimaging revealed right basal ganglia and left gangliocapsular infarcts, lesions known to produce apathy, reduced speech, and flat affect that resemble psychiatric symptoms.[3-5]

This case demonstrates how relying solely on phenomenological diagnosis can lead to misattribution. While affect and behavioral assessment remain valuable clinical tools, they must be supplemented by appropriate neurological examination when presentations are atypical or treatment-resistant. Despite our patient initially having a normal neurological examination, subsequent MRI revealed a basal ganglia infarct. This demonstrates that the assumption that patients presenting to psychiatric services must have purely psychiatric disorders can lead to missed diagnoses. A brief neurological screening examination should be considered standard practice during psychiatric assessment, especially with unusual symptom presentations.

Contrasting our case, Tobiano et al described a young woman with sudden left hemiparesis initially suggesting stroke, but expedited evaluation at a stroke center confirming conversion disorder instead.[6] Conversely, Venturini et al reported a case where an incidental vascular abnormality complicated a

functional neurological disorder diagnosis, explaining some but not all symptoms, which prolonged suffering and generated unnecessary medical costs.[7]

CONCLUSION:

Neurological and psychiatric symptoms frequently overlap, creating diagnostic confusion. Comprehensive neurological assessment, including appropriate neuroimaging, is essential even when psychiatric explanations seem plausible. Clinicians must maintain vigilance for organic pathology, particularly when symptoms are unusual in presentation, duration, or treatment response. This approach ensures accurate diagnosis and optimal patient care, especially in emergency settings where functional diagnoses may be prematurely assigned.

DECLARATION OF PATIENT CONSENT:

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of Interest
There are no conflicts of interest.

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