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CASE REPORT

Conversion Disorder Coexisting with a Depressive Illness in a Nigerian Teenager: A Case Report

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Summary

Conversion disorder presents with neurological symptoms such as altered voluntary motor, cognitive, or sensory functions that are not consistent with any recognised neurological disease. These symptoms are real, and no medical disease could account for them, thus causing a diagnostic conundrum. This case report describes a teenage girl who, following her father's demise, developed difficulty with breathing of sudden onset, limb twitches, stiff neck, and inability to walk. She had multiple hospital visits, but all the findings of laboratory investigations were essentially normal. The patient was managed with a multimodal approach that included psychotherapy, use of antidepressant medications, and family support. She recovered and could return to her routine after six months while still on clinic follow-up care. The objective of the report is to sensitise primary care physicians to assess patients holistically, including mental health status, especially when they present with medically unexplained symptoms. In addition, this case report seeks to increase the awareness of primary care physicians on conversion disorder, which is thought to be rare in our environment.

Keywords: Cognitive Behavioural Therapy, Conversion disorder, Depressive illness, Family support, Physical Therapy, Psychotherapy.

Introduction

Conversion disorder (CD), also known as functional neurological disorder, is a mental health condition in which a neurological or general medical condition is unable to account for the symptoms and signs that impair voluntary motor or sensory functions. [1] It is widely believed that conversion disorder occurs commonly in non-western and developing societies. However, growing evidence suggests it is a common condition worldwide, especially in primary care settings, but it is often underdiagnosed.[2] The reported prevalence varies depending on the diagnostic criteria used. However, some literature have reported a

prevalence of up to 50% in a paediatric clinic. [3] Therefore, conversion disorders may be very common but most often misdiagnosed in the primary care setting, mainly due to atypical presentations.[4]

The reported incidence of conversion symptoms varies with reports of global prevalence of CD put at about 20%. [5] Data from a large psychiatry registry in New York reported an annual incidence of 22 per 100,000. [6] A study in Kenyatta National Hospital, Kenya, also reported a 1.39 to 6.94% prevalence.[7] Some studies have reported an incidence of 20 to 25% in general hospital settings.[8] Most of the local literature on CD were case reports with no information on local incidence rates of conversion disorder.

Individuals with CD can present with impaired coordination or balance, arm or leg paralysis, weakness, loss of sensation in a body part, uncontrolled movements, hallucination, blindness, double vision, tunnel vision, unresponsiveness, aphonia, loss of the sense of smell, difficulty swallowing, the sensation of a lump in the throat, deafness, or urinary retention.[8,9] There may be only one episode or repeated episodes that occur sporadically.[9] Individuals with conversion disorder experience genuine anguish and are unable to regulate their physical symptoms, even in the absence of a definitive organic diagnosis.

The treatment of conversion disorder can be effectively achieved with both physical therapy and psychotherapy. [7,10] Pharmacotherapy is also recommended to address the underlying co-morbid mental health condition. [7,10] Family therapy has been acknowledged as an important factor in recovery. [11] A Nigerian study reported that there is poor knowledge of conversion disorders by paediatricians in Nigeria, and this could delay the identification of CD among children and adolescents with somatoform disorders. [3] In addition, the drive to exclude organic diseases, the fear of missing organic diseases and the poverty of skills in exploring psychological issues by physicians could contribute to the difficulties encountered in managing adolescents presenting with CD. [3]

This report aims to sensitise primary care physicians on the need to explore the psychological aspects of clinical cases, especially those presenting with unexplained symptoms. In addition, it is essential to highlight possible ways patients with conversion disorder can show and the multimodal approach to managing them.

Case Description

SU, a 15-year-old female, presented at the Family Medicine Clinic of the Lagos State University Teaching Hospital (LASUTH), Ikeja, Lagos, on 16 July 2023 with a two-month history of intermittent dyspnoea, twitches, and a stiff neck. The difficulty with breathing was of sudden onset, and there was no associated history of cough or chest pain. She had no history of similar complaints in the past, and she was not a known asthmatic. Her limbs were observed to be twitching at around the same time. There was no prior history of generalised seizures or loss of consciousness.
Additionally, she had a stiff neck and was unable to turn it. However, there was no photophobia, fever, or headache. She had no history of recent trauma, puncture wound or visual impairment. She also complained of increasing generalised weakness, which worsened until she was unable to stand unsupported.

Her mother noticed that the complaints began a few days following the one-year memorial service for her deceased father. She was said to have been away in school when her father passed away, and she was not informed of his death at that moment because she was the closest to him and she was writing her examinations. When the

news of her father's passage was eventually broken to her, she refused to talk to anyone about it anymore and did not cry. She was reported to have unexpectedly started crying and questioned where her father was after the annual memorial service for her late father. She had her father's photo on her phone's display, and most of the time, people noted that she was moody. She also gave up on all she had enjoyed doing.

When the symptoms first appeared, she presented at several private hospitals, and the blood investigations (Full Blood Count, Serum Electrolytes, Urea, and Creatinine) were essentially normal. She also had spirometry and neuroimaging, including a brain CT scan and electroencephalogram, but the findings were normal in each case.

At the Family Medicine Clinic, video recordings of some of the occurrences of her symptoms were examined, and she was interviewed when the mother was excused from the consulting room. The attending physician established a rapport with her and provided assurances of confidentiality. The patient affirmed she missed her father and narrated how hard it had been for her to move on with life since he passed. She had a severe depression score of 21 out of 27 on the Patient Health Questionnaire (PHQ-9) and a minimal anxiety score of 3 out of 21 on the Generalised Anxiety Depression (GAD-7) scale. She feared that she might die, and she did not know why she was having the symptoms. She had not been able to return to school since the symptoms began two months ago. She expressed the desire to go back to her normal self. She was worried that she had been accused of fabricating the symptoms and would want her mother educated about her illness. Her premorbid personality was that of a quiet, calm child who loved cooking, dancing, and watching movies. She had a good relationship with her siblings, and she had no diagnosed personality disorder. Her family was highly functional, with an APGAR score of 10/10.

Physical examination revealed a young lady in a wheelchair who had been unable to ambulate for a week prior to the presentation. She was not pale, afebrile (T-36.3˚C), anicteric, and well hydrated. Her weight was 52kg, and her height was 1.62m, with a Body Mass Index (BMI) of 19.8kg/m^2. A mental state examination revealed a neatly and appropriately dressed lady oriented in time, place, and person. She had a low mood. She was sluggish and struggled to maintain eye contact during the consultation. Her speech, though prompted, was coherent and relevant with low tone and volume. She had a flat affect, which was congruent with her mood. She had sustained attention, average intellect, fair judgment, and full insight. Systemic examination revealed a respiratory rate of 14 cycles per minute with bilateral chest symmetry. Her chest expansion and vocal and tactile fremitus were equal bilaterally. Her lung fields were also clear. Her pulse rate was 83 beats per minute, regular, full volume, and her blood pressure was 115⁄72mmHg. The cardiac apex was at the left fifth intercostal space, mid-clavicular line and only the first and second heart sounds were heard.

An assessment of conversion disorder in a teenager was made based on the presence of neurological and clinical symptoms despite a lack of laboratory pointers to any specific disease. In addition, these symptoms were related to an adverse event in the family.

Management

The index patient and her mum were counselled that the symptoms were real and were likely a result of unresolved emotional disturbance caused by the demise of her father. She had Cognitive Behavioural Therapy (CBT), which has been reported to help patients dissect the relationships among their emotions, cognitions,

and behaviours to identify and reframe irrational and self-defeating thoughts, improving mood and modifying behaviours. Despite the initial fears, the patient was encouraged and supported to get up from the wheelchair and walk around. The patient was also encouraged to exercise regularly, and her mother and other family members were tasked to join and encourage her. She was also commenced on oral Citalopram 10mg daily as an antidepressant and was subsequently referred to a psychiatrist and psychologist.

After three months of psychotherapy sessions, antidepressant therapy and good family support, she improved significantly. Her PHQ-9 score was 3 out of 27, and her GAD-7 score was 0. She had not experienced any episode of difficulty with breathing or neck stiffness, and she had been walking unaided. She was scheduled for regular follow-up and encouraged to seek medical help whenever she had any challenges.

Discussion

Conversion disorder (CD) is commonly encountered in clinical practice, but there is a paucity of literature on the condition in Africa.[12] It is classified as a somatoform disorder.[8] CD is a condition characterised by neurological symptoms and other movement disorders without a neurological cause or general medical disease or condition which arises in response to psychological conflicts, as found in the index case. [11,13,14] Despite the absence of a definitive organic diagnosis, the patient's distress is real, and the symptoms are involuntary. [1] The index patient presented with neurological symptoms that have no medical cause following the demise of her father. The uncontrollable symptoms differentiate CD from factitious disorder and malingering, in which symptoms are intentionally or consciously generated. [2,15]

CD is more common among adolescents aged 10-19 years, as seen in the index patient, than younger children, and it is rarely seen in children less than five years old. [6] The female-to-male incidence of CD ranges from 2:1 to 10:1.[1] The prevalence of CD in developing countries where the index case belonged has been estimated to be as high as 31% compared to 5% in developed countries.[1] Factitious disorder (FD) has been described as both disease and deception, and the diagnosis and management can be challenging. Patients with factitious disorder are considered to have a "sick role" as the motivation for feigning the illness. FD is distinguished from malingering by this “sick role” seeking in contrast to external incentives acting as the motivating factor in malingering. The index patient did not perceive the sick role as a motivation for feigning her symptoms, nor did she seek external incentives. [16,17]

FD occurs in early adulthood, with a mean age of onset of 25 years in both genders, but it is more common in females. [16,17] FD accounts for up to 0.6%–3.0% of psychiatric referrals and 3-5% of doctor-patient contacts. [17] Managing FD requires a strong patient-therapist relationship, which can strengthen the patient's conscious self-control to minimise the symptoms. Hence, the healthcare provider has to be open-minded.[17] Malingering, on the other hand, is the intentional fabrication or amplification of mental or physical symptoms to attract secondary gain or external benefits such as seeking undue attention, avoiding work responsibilities, evading criminal prosecution, escaping a deserved prison sentence or obtaining medication. [18,19] The prevalence of malingering is challenging to estimate, but a study reported a prevalence of 20 to 50% among patients suffering from chronic pain with financial incentives. The management of patients with malingering includes indirect confrontation, behavioural therapy, psychotherapy and counselling. [20]

Patients who convert their emotional problems into physical symptoms spend nine times the cost of healthcare as people who do not, and 82% of adults with CD stop working because of their symptoms.[1] The index patient was out of school for more than a semester and did a lot of laboratory and imaging investigations, all of which were reported as normal. Many patients with CD are found to have a history of trauma, adverse life events, or death of a close family member, as in the index case, among other factors preceding the symptoms of CD. [8,13] Depression, as found in the index patient, has been reported as one of the common co-morbid conditions in patients with conversion disorder. [11] The diagnostic criteria used by DSM-V and ICD-10 in classifying conversion disorder take a psychosocial perspective. Both diagnostic systems define the following four features to qualify for CD: neurological symptoms (motor and sensory) and loss of consciousness; no substantial evidence of organic causes that can explain the disease; psychological stressors at the onset of the disease and exclusion of faking symptoms.[5] The diagnosis of a functional neurological disorder in the index patient was based on the presence of neurological symptoms, laboratory results that were incompatible with a structural neurological illness, a psychological stressor which was the demise of her father and the fact that her symptoms were genuine as there were no identified secondary gains and her expression of the desire to get well.[5 10,15] The management of CD requires a multimodal and multidisciplinary approach as implemented in the index patient. [6,10] CBT and physical therapy (PT) in the form of regular exercise, as adopted in managing the index patient symptoms, have been proven to help with stress management and developing new behavioural responses. [6,10]

Conclusion

Conversion disorder is a mental health condition that can significantly affect the quality of life. It is essential to understand that these patients are in genuine anguish even in the absence of organic disease. The management of a conversion disorder requires multidisciplinary care, including the family, which is very important in supporting and encouraging the patient all through the recovery journey. It is pertinent for primary care physicians to have a high index of suspicion when interacting with patients, especially adolescents, with non-specific or medically unexplained symptoms.

Declaration: The patient consented to have her data used in this report.

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References

1. Naidoo L, Bhigjee AI. The spectrum of functional neurological disorders: A retrospective analysis at a tertiary hospital in South Africa. South Afr J Psychiatry 2021;27:1–9. https://doi.org/10.4102/sajpsychiatry.v27i0.1607

2. Nwokocha ARC, Chinawa JM, Onukwuli V, Ubesie A, Ndukuba A, Chinawa AT, *et al.* Somatisation disorder among adolescents in southeast Nigeria: a neglected issue. Int J Ment Heal Syst 2017;11:2. https://doi.org/10.1186/s13033-017-0161-3

3. Ndukuba AC, Ibekwe RC, Odinka PC, Muomah RC, Nwoha SO, Eze C. Knowledge of conversion disorder in children by paediatricians in a developing country. Niger J Clin Pract [Internet]. 2015 [cited 2024 26 October];18:534–537. Available from: https://journals.lww.com/njcp/fulltext/2015/18040/knowledge_of_conversion_disorder_in_children_by.17.aspx

4. Oluchukwu N. Conversion disorder: epidemiology, symptoms and management. DOKITA [Internet]. 2023 [cited 2024 26 October];40:6–11. Available from: https://www.ajol.info/index.php/dokita/article/view/272481

5. Beri D, Prayogshala M, Reddy KJ. An Overview of Conversion Disorder: Prevalence, Causes, and Treatment. Acta Sci Neurol. 2020;3:64–68.

6. O'Neal MA, Baslet G. Treatment for patients with a functional neurological disorder (conversion disorder): An integrated approach. Am J Psychiatry 2018;175:307–314.

7. 7. Mbae LK. Psychosocial Correlates Of Conversion Disorder Among Adolescents Seen At The Outpatient Youth Clinic At Kenyatta National Hospital. Nairobi. A Thesis Submitted for the Award of Master of Medicine in Psychiatry at the University of Nairobi. 2019;1-58

8. Ali S, Jabeen S, Pate RJ, Shahid M, Chinala S, Nathani M, *et al.* Conversion Disorder—Mind versus Body: A Review. Innov Clin Neurosci. 2015;12:27.

9. Moini J, Koenitzer J, LoGalbo A. Somatic symptom disorder and related disorders. Glob Emerg Ment Disord [Internet]. 2021 [cited 2024 27 October];203–216. Available from: https://linkinghub.elsevier.com/retrieve/pii/B9780323858373000157

10. Obimakinde AM, Ladipo MM, Irabor AE. Familial and socio-economic correlates of somatisation disorder. Afr J Prim Health Care Fam Med 2015;7:1–8. https://doi.org/10.4102/phcfm.v7i1.746

11. Chukwujekwu DC, Okeafor CU. Conversion disorder: A rare psychiatric presentation in a 15-year-old depressed female adolescent at the University of Port Harcourt Teaching Hospital, Nigeria. Int J Curr Res 2017;9:47403–47406.

12. Ndukuba A, Ibekwe R, Odinka P, Muomah R. A report of three cases of Nigerian children with conversion disorder. Afr J Med Health Sci 2015;14:140. https://doi.org/10.4103/2384-5589.170188

13. Powsner S. Conversion Disorder in Emergency Medicine: Background, Pathophysiology, Epidemiology [Internet]. [cited 2022 8 October]. Available from: https://emedicine.medscape.com/article/805361-overview

14. Adesanya OA, Adewale BA, Oduguwa IO, Onumeguolor JA. Sudden Mono-ocular Vision Loss in An Adolescent Female: A Case Report and Review of the Literature. Eur J Med Health Sci 2020;2:2–4. https://doi.org/10.24018/ejmed.2020.2.3.289

15. Stone J, Sharpe M. Conversion disorder in adults: Epidemiology, pathogenesis, and prognosis - UpToDate [Internet]. [cited 2022 20 October]. Available from: https://www.uptodate.com/contents/conversion-disorder-in-adults-epidemiology-pathogenesis-and-prognosis

16. Dahale A, Hatti S, Thippeswamy H, Chaturvedi S. Factitious disorder-experience at a neuropsychiatric centre in southern India. Indian J Psychol Med 2014;36:62–65.

17. Fasesan OA, Awokoya ET. Insights into the clinical profile and comorbidities of Factitious Disorder in a multispecialty setting in southwest Nigeria: A cases series and review. Babcock Univ Med J [Internet]. 2022 [cited

2024 27 October];5:131–41. Available from: https://bumj.babcock.edu.ng/index.php/bumj/article/view/156

18. Sodeinde O. Malingering assessments in African forensic settings. In: The Handbook of Forensic Mental Health in Africa. 1st Edition. Taylor & Francis Group. 2021. pp124–139.

19. Davids K, Adesina A, Oyeyemi A, Eguvbe A, Rotifa S. Young doctors' perspectives on malingering among corps members in a resource-limited orientation camp clinic: A mixed-method study. Yenagoa Med J 2020;2:18–27.

20. Alozai U, McPherson PK. Malingering - StatPearls - NCBI Bookshelf [Internet]. [cited 2024 27 October]. Available from: https://www.ncbi.nlm.nih.gov/books/NBK507837/