



RESEARCH ARTICLE

CONVERSION DISORDER: A RARE PSYCHIATRIC PRESENTATION, IN A 15YEAR OLD  
DEPRESSED FEMALE ADOLESCENT AT THE UNIVERSITY OF PORT HARCOURT  
TEACHING HOSPITAL, NIGERIA

\*Chukwujekwu, D.C. and Okefor, C. U.

Department of Neuropsychiatry, University of Port Harcourt Teaching Hospital

ARTICLE INFO

Article History:

Received 29<sup>th</sup> December, 2016  
Received in revised form  
09<sup>th</sup> January, 2017  
Accepted 15<sup>th</sup> February, 2017  
Published online 31<sup>st</sup> March, 2017

Key words:

Conversion, Psychosocial,  
Disorder, Neurological,  
Mood.

Copyright©2017, Chukwujekwu and Okefor. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Chukwujekwu, D.C. and Okefor, C. U. 2017. "Conversion disorder: A rare psychiatric presentation, in a 15year old depressed female adolescent at the university of port harcourt teaching hospital, Nigeria: A case report", *International Journal of Current Research*, 9, (03), 47403-47406.

ABSTRACT

Conversion disorder is a condition in which patients present with neurological symptoms such as numbness, blindness, paralysis, or myoclonus and other movement disorders without a neurological cause, which arises in response to difficulties in the patient. Until recently, hysteria was believed to be uncommon amongst the indigenous inhabitants of tropical Africa. This article reports the first case of Conversion Disorders in an adolescent in UPTH and emphasizes the need for better clinical judgement to reduce the burden of missed diagnosis and also the impact of psychosocial stressors, harsh parenting, hostile home environment and high expressed emotion in the aetiology of the disorder and establishes a temporal relationship between the psychological stressors and the disorder which underscores its diagnostic and prognostic implications.

INTRODUCTION

Reason for Evaluation

O.N. is a 15 year old female adolescent who presented at the children's emergency ward of the Paediatrics Department of the University of Port Harcourt Teaching Hospital (UPTH), with a 4hour history prior to presentation of a first episode of complex abnormal myoclonic jerks and non-goal directed movements. She is a single, Christian, senior secondary school (SS.1) student in Port Harcourt, but from the South East region of Nigeria. She was brought to the Emergency ward by the parents, on account of jerky movements with no altered sensorium. When the Paediatric managing team did not find anything that can clinically explain the strange presentation based on normal findings on physical examination and laboratory investigations, she was then referred to the Neuropsychiatry Department for psychiatric evaluation.

History of Psychiatric and General Medical Illness

Patient was said to have been apparently well until a month to presentation when she had fever for about 1 week which resolved after treatment with anti malaria medication 3 days before onset of abnormal body movements, she had rashes all

over the body for which the parents administered an herbal preparation called "7 keys to power", and calamine lotion. The rashes resolved but she subsequently developed abnormal persistent involuntary motor movement characterized by repeated sudden jerks involving the trunk, upper and lower limbs and banging of head, for which she was restrained. There was associated screaming and weepy spells but there was never loss of consciousness. It is worth noting; that there has been significant decline in academic functioning for which patient has become an object of ridicule both at school and at home involving the parents and siblings. This has necessitated the change of school on 3 occasions with the attendant parental disaffections and harsh admonitions. This made patient socially withdrawn both at home and school. Patient was called derogatory names and flogged frequently with cable wire, sometimes wounded in the process in the process of the so-called correction. The patient found the treatment very distressful and this often made her cry. When symptoms dramatically resolved, she agreed to a positive history of low mood because of the hostile home environment, the confiscation of her GSM handset, the tearing of her diary and restriction from having visitors, both male and female. She reported having a definite suicidal plan of stabbing herself with a knife, but made no attempt. However, she did not mention the plan to anybody. Patient also admitted to low energy, loss of interest in previously pleasurable activities, low self-esteem and feelings of hopelessness with no impairment in sleep or appetite. Patient insisted that she was neither aware of the

\*Corresponding author: Chukwujekwu, D.C.

Department of Neuropsychiatry, University of Port Harcourt Teaching Hospital.

abnormal movements that occurred for 9 days before the spontaneous recovery nor did she intentionally produce the symptoms to get back at the parents.

### **Family, Development and Social History**

Patient is the first of four children (3 alive) in a monogamous family setting. The fourth child died at the age of 4 from febrile illness. Father is a lawyer while mother is a trader with tertiary education. The other siblings are well adjusted. There was no family history of psychiatry illness. Both patient and her siblings live with their parents. Mother admitted that father constantly used derogatory names to address the patient [pussy cat, "Iti" (block head in local parlance), Mumu (fool) and the like]. Physical abuse in the form of flogging with electric copper wire was meted on the patient in addition to stopping her friends from visiting her at home. This made the patient distant from particularly the father and could not tell him of any problem or request for anything without writing it on a piece of paper and hiding it in her dad's clothes. Pregnancy, neonatal and early childhood history was not complicated. However, because of her poor academic performance, she had attended 4 different schools in 5 years and was said to have been forced to repeat even without failing in one of the schools without the dad's knowledge. Menarche was at 12 years and patient has not had any sexual experience. O.N. was described as clumsy, reserved with few friends, often kept to herself, did not like group activities and occupied her time with reading novels.

### **Mental State Evaluation**

When patient presented at the emergency unit, the only aspects of mental state examination that could be assessed were Appearance/Behaviour, and speech. Other aspects of the MSE could not be assessed because patient could not be engaged. Appearance/Behaviour revealed loss of social grace with patient unconsciously stripping herself naked as a result of involuntary abnormal jerky myoclonic movements, with no loss of consciousness. There was upward rolling of eyes, tongue biting, no urinary or faecal incontinence and post-ictal sleep. Speech was poor in content, hesitant and very slurred. Insight could not be assessed but was obviously lacking. When symptoms resolved spontaneously, there were no abnormalities noted on mental state examination.

### **Physical Examination and Laboratory Investigations**

On physical examination, central nervous system showed that patient was oriented in time, place and person; there was no neck stiffness or signs of meningeal irritation. There was normal tone on all limbs and the deep tendon reflexes were exaggerated. Other systemic examination findings were essentially normal. When she was examined at the emergency department, there was no external evidence of any head injury or trauma and her Glasgow coma scale score was 15. She had staccato, slurred but hesitant speech. Her gait did not fit any recognised pattern but after only two or three steps she would stagger and collapse, so had to be supported to the convenience. There were no eye signs and at times it was possible to distract her. She was admitted to the A&E ward for observation and routine blood tests, none of which showed any abnormality. Over the next two to three days, it was noted that her symptoms fluctuated. Because there was some concern that this might be an unusual presentation, after referral to

psychiatry department, computed tomography (CT-Scan) and electroencephalography (EEG) performed showed no abnormality. Similarly, other tests done revealed no abnormality. These include: liver function test, retroviral screening, thyroid function test, abdomino-pelvic scan, pregnancy test, venereal disease research laboratory (VDRL), and serum electrolyte, urea and creatinine assessment.

### **Diagnosis**

Diagnostic puzzle was faced by the managing team because of the strange presentation. The Paediatric managing team made impressions of Meningitis, Cerebral Malaria, septic abortion, drug toxicity, pseudo-seizures and a possible space occupying lesion. Malingering was also considered. The Paediatric team invited the ophthalmology team who discovered nothing after evaluation. On review by the Psychiatry team, organic mood disorder, childhood depression secondary to child abuse was entertained as working diagnosis. On the 8<sup>th</sup> day on admission after the CT scan was done which coincided with the day the father of the patient bought her a new phone, it was noticed that the symptoms completely disappeared and never reoccurred.

This prompted a review of the diagnosis to a more definitive diagnosis of conversion disorder with comorbid depression based on the DSM-IV definition of conversion disorder as outlined below:

- One or more symptoms or deficits are present that affect voluntary motor or sensory function suggestive of a neurologic or other general medical condition. This was confirmed because there were no abnormal findings on central nervous system examination.
- Psychological factors are judged in the clinician's belief to be associated with the symptom or deficit because conflicts or other stressors precede the initiation or exacerbation of the symptom or deficit. A situation where the stressors precede the onset of symptoms by up to 15 years is not unusual. In this case the psychological stress emanating from a temporal relationship between onset of symptoms and the ongoing harsh parenting and childhood abuse which the parents voluntarily admitted to is evident.
- The symptoms or deficit is not intentionally produced or feigned (as in factitious disorder or malingering). Patients insist on not being aware of the emergency or of intentionally producing the symptoms.
- The symptoms or deficit, after appropriate investigation, cannot be explained fully by a general medical condition, the direct effects of a substance, or as a cultural sanctioned behaviour or experience. It is noteworthy that findings on physical examination and laboratory investigations are within normal limits..
- The symptom or deficit causes clinically significant distress or impairment in social, occupational, or other important areas of functioning or warrants medical evaluation. Obvious impairment in the personal, social, family and academic functioning of the patient were noted.
- The symptom or deficit is not limited to pain or sexual dysfunction, does not occur exclusively during the course of somatization disorder, and is not better accounted for by another mental disorder. This also holds true for this patient.

So this presentation satisfied all the criteria for conversion disorder.

### Treatment

This was carried out using the BIOPSYCHOSOCIAL MODEL

### Pharmacotherapy

In the course of treatment, she received intravenous Ceftriaxone, Gentamycin and Metronidazole, as well as oral antimalarial, and antibiotics, based on the impressions made. After review by the psychiatry team, the drugs added included Antipsychotics, Antidepressant, Anxiolytics, and Anticonvulsants. Nevertheless, when the definitive diagnosis of conversion disorder with co-morbid depression was made, some drugs were tapered down and withdrawn while antidepressants were continued.

### Psychological

Some psychological measures were also employed in treating the patient. Psycho-education of the family members was done to help them understand the nature of the patient's illness.

### Cognitive Behavioural Therapy

Emphasis was on improving coping skills (social skills, assertiveness) to make patient more assertive.

### Family Therapy

All members of the family was involved in a therapeutic interactive session where the father accepted to use more civil ways in disciplining her daughter and to be consistent and impartial in his treatment.

### Social

In conjunction with the social workers, attempts were made at restoring the normal family dynamics to one that is more conductive and less hostile to the patient.

## DISCUSSION

Conversion disorder is defined as "an alteration or loss of physical function that suggests a physical disorder but is apparently an expression of a psychological conflict or need" (WHO, 1992 and America Psychiatric Association, 1987). In this patient, psychological conflict has been proven to have a direct relationship to the onset or worsening of her symptoms. This is a rare problem and by definition a diagnosis of exclusion (Poyner, 1997). It is more prevalent in non-Western, less industrialized cultures such as China, Libya, and Mexico (Broke, 2007). However, lesser number of cases have been reported in some countries e.g Nigeria, Ethiopia, Turkey, India, and Australia (www.scribd.com). Engel estimated that between 20% and 25% of people will have a conversion disorder at some time in their life, and that the incidence of the disorder in psychiatric wards is between 5% and 16% (Engel, 1970). The prevalence and incidence in Nigeria is not clearly reported. It is not a diagnosis often reached in the emergency room (Poyner, 1997). This is in keeping with our findings here and explains the diagnostic puzzle faced with this patient at the emergency department. No case of conversion disorder

presenting with abnormal body movement has been reported in the literature in Nigeria. Elsewhere, the cases reported were that of conversion disorder presenting as a case of paralysis in a nulliparous woman in Kaduna (Adogu, 1992), conversion disorder presenting as head injury (Poyner, 1997), and that resulted from the use of Sodium Valproate. There have also been reports of co-morbidity associated with conversion disorder. Folks et al reviewed 62 patients who left hospital with a diagnosis of conversion disorder and found that 18 had a psychiatric disorder (Folks, 1984). In this patient, the co-morbid diagnosis is depression.

### Differential Diagnosis and Treatment Response in this Adolescent

The history of low mood, low energy, loss of interest in previously pleasurable activities, definite suicidal plans, low self esteem, feelings of hopelessness and weeping substantiated a diagnosis of severe depression. Also based on the history of fever and rashes before the onset of mood symptoms, a diagnosis of organic mood disorder was also considered. The enduring stressors of verbal and physical abuse by father, harsh parenting, hostile home environment, and high expressed emotion made a diagnosis of child abuse likely. Adjustment disorder was considered because patient was finding it difficult to adjust to the parenting style of parents. Treatment response was gradual but on the 9<sup>th</sup> day of admission, spontaneous resolution of symptoms was noted.

### Conclusion

Putting into consideration the issue of psychiatric co-morbidity in this adolescent as well as the psychological impact and the diagnostic puzzle encountered, each of which poses its own diagnostic and treatment challenges, there is need for increased awareness and collaboration using the models of consultation and liaison services among psychiatrists and other health care professionals in managing children and adolescents in order to correct the burden of missed diagnosis with its attendant positive diagnostic and prognostic implications. Prognosis in this patient is postulated to be good because of the good social support and the readiness to change the faulty parenting style by parents.

## REFERENCE

- Adogu, A., Abbas, M., Ishaku, D. 1992. Hysterical paralysis as a complication of snake bite, *Trop Georg Med*, vol. 41, 167-169.
- Alison, 1987. Orr-Andrewes: "The case of Anna O: A Neuropsychiatry", *Journal of the Psychoanalytic Association*, vol. 35 p. 399.
- America Psychiatric Association. Diagnostic and Statistical Manuel of Mental Disorders, 3<sup>rd</sup> ed, revised. Washington, DC: American Psychiatric Association, 1987; 257-9.
- Broke, J.C. 2007. Psychopathology, Marwood University, 2007.
- Engel G.L.; Conversion symptoms. In: Macbryde C.M. ed. Philadelphia: J.B. Lippincott, 1970: 650-68.
- Folks D.G., Ford C.V., Regan W.M. Conversion symptom in a general hospital. *Psychosomatics*, 1984; 25, 285-95.
- Messina A.: Valproate in Conversion Disorder, case report *Med*. 2010.

Poyner, F., Pritty, P. 1997. Conversion Disorder presenting as head injury, *Journal of Accident and Emergency Med.*, 1997, 14, 263-264.

Stone, J., Carson, A., Sharpe, M. 2005. Functional Symptoms in Neurilogy Assessment. *Journal of Neurology, Neurosurgery and Psychiatry* (Neurology in practice); 76 (suppl 1): 2-12

World Health Organization: The ICD-10 Classification of Mental and Behavioural Disorder: Clinical Description and Diagnostic Guidelines. P. 1-267.

[www.scribd.com](http://www.scribd.com): Dissociative Disorder, chapter 8.

\*\*\*\*\*