

Catatonic symptoms in a 13 year old female presenting with a febrile illness: a case report

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Abstract

Few studies have reported the occurrence of catatonia in Nigeria and especially in the Niger Delta region. It is thought to be very rare among children and adolescents and occurs as a subtype of schizophrenia. This report also highlights the influence of some socio-cultural factors on patient management. We report a case of a 13 year old female with a febrile illness who presented with complaints of abnormal posturing of one month and reduced verbal communication of two weeks durations. She was commenced on medications but a week later, the parents signed against medical advice on the conviction that the ailment was spiritual. Catatonia may not be as rare as is believed and may increasingly be associated with other disorders than schizophrenia. A high index of suspicion should be entertained so as to promptly identify cases and institute treatment. Cultural influences and caregiver education are very important in the management.

Keywords

Adolescent, Catatonia, Fever, Spiritual

1. Introduction

Catatonia is a complex condition characterized by the presence of various motor signs and symptoms. It remains a poorly understood, poorly studied, and poorly recognized syndrome and also believed to be under-reported.^{1,2,3,4}

Catatonia is a motor dysregulation syndrome in which patients lose the ability to move normally despite having the full physical capacity to do so. It is a syndrome characterized by increased muscle tone. The syndrome was first described by Karl Kahlbaum, in 1874, in his monograph, *Die Katatonie oder das Spannungsirresein*.⁵

More than a century later, there are still controversies on what makes a symptom catatonic, and no consensus on which signs and symptoms constitute a catatonic syndrome.⁶ Owing to this, the existing diagnostic systems and catatonia rating scales significantly differ from each other in terms of the time-frame of the examination and the number, composition, and definitions of signs and symptoms that would form the catatonic syndrome(s).^{1,6} The Diagnostic and Statistical Manual of Mental Disorders,

Fourth Edition (DSM-IV)⁷ and International Classification of Diseases, Tenth Edition (ICD-10)⁸ are two well-known classifications that differ on this subject. This confusion is worsened in developing countries where most medical conditions are believed to have religious and spiritual undertones.^{1,2,9}

Previously catatonia was considered strictly as a subtype of schizophrenia. However, it is now known that this syndrome can occur in mood disorders, autism and medical illnesses among others.^{10,11,12} Catatonia has also been associated with use of drugs such as ecstasy, phencyclidine, inhalants, steroids, and neuroleptics, as well as the abrupt withdrawal of benzodiazepines.^{4,12}

The most common symptoms of catatonia among patients with schizophrenia are mutism, starring and posturing; while, mutism, starring and withdrawal are the most common symptoms among those with mood disorders.⁹ The features of catatonia among patients with medical conditions have been lesser delineated in comparison, especially among children and adolescents. However, they are thought to be similar in presentation and

treatment modalities irrespective of the cause or age group involved.¹⁰ Reports on treatment outcomes have consistently shown that benzodiazepines (especially lorazepam), barbiturates and electroconvulsive therapy (ECT) are effective in treating catatonia.^{2,3,5} Treatment is hindered frequently because the syndrome is not well recognized, more so in developing countries where the bizarre presentation is often given a spiritual connotation and prompting the search for spiritual interventions rather than effective medical treatment. This is further worsened by the fact that treatments like ECT are not readily available in most centres in developing countries.

2. Case Presentation

A 13 year old female junior secondary student admitted to the Department of Pediatrics, Niger Delta University Teaching Hospital with complaints of abnormal posturing of one month duration and reduced verbal communication of two weeks. There was associated stiffness of the body and difficulties with movement. No prior history of trauma. The reduced verbal communication was gradual in onset. Initially, patient was able to say two to three words until she became mute. Her appetite and sleep became poor and she could no longer carry on with her routine activities. She was occasionally restless and resisted attempts by her mother to feed and bath her. No violent behavior or history of perceiving things others around her did not perceive in clear consciousness. No associated history of loss of consciousness, seizures or fever. Patient had no history of psychiatric illness in the past. She was born into a polygamous home belonging to the low socioeconomic class. No known family history of psychiatric illness. She took some over-the-counter medications (names unknown) before presentation.

Physical examination revealed a young female who was conscious and alert, febrile (T 38.2c), pale, anicteric, acyanosed and not dehydrated. She had evidence of muscle wasting and a body mass index of 12Kg/m². Kernig and Brudzinski signs were negative but there was hypertonia in all limbs and rigidity. Respiratory rate was 18 cycles per minute and breath sounds were vesicular. Pulse rate was 100 beats/minute (regular and full volume), heart sound 1 & 2 were present and blood pressure was 100/70mmHg. Abdomen was flat with no organomegaly. Mental state examination revealed a young girl, asthenic build with evidence of wasting, lying on bed restrained on both upper arms. Unresponsive to calls but eyes were open and following events around. She was mute and resisting attempts at examination. There was posturing, rigidity and waxy flexibility. Other aspects of the mental state could not be assessed due to mutism.

Urinalysis, Electrolytes, Urea and Creatinine, and Cerebrospinal fluid analysis results were within normal limits. There was no malaria parasite seen in the blood film. Retroviral screening was negative. Full blood count result was normal except packed cell volume (PCV) which was

22%. Brain CT scan could not be done on account of lack of funds and the nearest CT scan centre was about 150 km away.

An assessment of Organic Catatonic Disorder to rule out septicemia was made. Patient was commenced on intravenous diazepam 5mg, 12 hourly for 72 hours. Lorazepam was not available. Intramuscular haloperidol 5mg 12 hourly and oral haloperidol 2.5mg daily and 2.5mg nocte were prescribed. The paediatric team commenced parenteral Cefuroxime, paluther and transfused with a pint of whole blood. A nasogastric tube was passed for feeding and medications administration. Patient's temperature normalized after about 48 hours; however, she was still mute and unresponsive to command. Electroconvulsive therapy was contemplated but could not be done due to financial and logistic constraints. A week later, patient was still mute but sleep had greatly improved and she was tolerating tube feeding. Her mother told the health team that she was convinced the patient's problems were spiritual and not medical. She requested for discharge so as to take patient to seek spiritual help. Attempts to educate and convince her were not successful and she subsequently signed against medical advice and took the patient away. Several attempts were made to reach them but patient was lost to follow up.

3. Discussion

The patient presented with posturing and mutism which are two of the common features of catatonia among children and adolescents as documented in literature.^{10,11,12} These features are striking and easily recognized by care givers. However, the patient's mother could not give a history of fever. This was identified on examination. Possible reasons could be that she had been given some medications which masked the fever or that the bizarre catatonic features took more of their attention. Other features of catatonia found were negativism, waxy flexibility and rigidity. These have also been documented in the literature.¹² Though schizophrenia is regarded as the commonest cause of catatonia⁹, no clear cut schizophrenic symptom was identified in this patient. The presence of fever points to an organic aetiology in this case. However, all laboratory investigations were negative except for the PCV which was below normal and warranted blood transfusion. It could be that the patient had taken antimalarials and antibiotics bought over the counter. These could have distorted the real picture giving false negative investigations. Also, it is generally known that most laboratory investigations in third world countries may turn out false results due to poor equipments and techniques.¹³ Thus, most Clinicians treat empirically while awaiting investigation outcomes which may take several days or weeks. Most also treat for sepsis and malaria despite negative results for the same reason above. Therefore, the presence of an organic aetiology in this case is very likely. Malaria and sepsis are very common causes of fever in this

part of the globe especially among children and adolescents who suffer the severe types.¹⁴ This patient had no history of schizophrenia or any other mental illness in the past. Hence the febrile illness is the most likely precipitant.

The management of this patient was partly hindered by absence of some effective remedies such as lorazepam and ECT. These have been shown to improve outcomes in catatonia.^{2,3,5} However, the patient showed some improvements in sleep and tolerated NG tube feeding. One week was too short for any significant improvement to be seen especially without ECT. It is known that people in this part of the world often attribute illnesses to spiritual 'attacks' by perceived enemies, witches and 'evil forces'.¹⁵ This applies to even common illnesses like hypertension and diabetes, but more so to illnesses that have bizarre and frightening clinical presentations such as seizures and catatonia. Pathway to care studies have shown that most people seek spiritual help from herbalists and religious organizations rather than orthodox care based on beliefs about aetiologies of illnesses.^{16,17} This is clearly evident in this case. The patient's mother told the health team that spiritual forces were responsible for the illness and she wanted to go for spiritual interventions. This has been a great impediment to efforts at providing qualitative and sustained healthcare to the populace in most African countries.

4. Conclusion

The occurrence of catatonia is highly under-recognized and under-diagnosed. Doctors in other medical specialties have relatively poor skills at recognizing and diagnosing most Psychiatric disorders. Thus, cases that should have been effectively treated remain unattended to. This increases morbidity and mortality. There is need for more research on catatonia and other Psychiatric disorders in our environment. The populace needs to be educated continuously on the nature and treatment of illnesses (especially psychiatric disorders) and the healthcare delivery systems strengthened to improve quality and efficiency. It is also recommended that the orthodox healthcare delivery system should work with the traditional care givers to evolve a holistic, coordinated and effective health system in third world countries.

Consent

Written informed consent was obtained from the patient's mother at discharge before this report.

Abbreviations

ECT- Electroconvulsive Therapy,
NG tube – Nasogastric tube,
PCV = Packed Cell Volume

Competing Interests

The authors have declared no competing interests

Authors' Contributions

CUE was directly in charge of the patient's liaison management and organized most of the case write-up. EID was also involved in the management of the patient and did the literature search. He also contributed to the write-up.

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