Gratification Disorder Mimicking Childhood Epilepsy in an 18-month-old Nigerian Girl: A Case Report and Review of the Literature

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ABSTRACT

Gratification disorder is common in younger children, but is often unrecognized because unlike in adolescents, it does not involve manual genital manipulation and the clinical features are quite variable; therefore a thorough history, physical examination, and video recording of the events will go a long way in making the correct diagnosis, otherwise it could easily be misdiagnosed as epilepsy, nonepileptic paroxysmal movement disorder, or even gastrointestinal disorder.

Key words: Gastrointestinal disorder, gratification disorder, movement disorder, seizure

INTRODUCTION

Gratification disorder also known as “benign idiopathic infantile dyskinesia” is a form of masturbatory behavior that is often mistaken for epilepsy, abdominal pain, paroxysmal dystonia, or dyskinesia.[1] Though often called a ‘disorder,’ it is a normal behavioral variant seen in early childhood.[2] It occurs in children between age of 3 months and 3 years with a second peak incidence at about the adolescent age. Its exact mechanism is poorly understood, but has been associated with self-tension, boredom, excitement, genital infection, and lack of stimulation.

Gratification behavior in children is quite common, and has been reported in 90-94% of males and 50-55% of females.[3] However, it has variable clinical presentations in early childhood and failure to recognize these behaviors may result in unnecessary investigations and treatment.

Despite the documented occurrence of self-genital stimulation in children in western literature, there is paucity of literature depicting its exact physical characteristics in our environment, this may be due to few or nonparental complaint of these problems because issues bothering on genital stimulation may be considered as a taboo in some African society.[4] We therefore report a case of gratification disorder in an 18-month-old girl who was initially diagnosed to have epilepsy, but subsequently turned out to be gratification behavior.

CASE REPORT

A 18-month-old toddler was brought to the neurology clinic of Aminu Kano Teaching Hospital, Kano by her mother with complaints of abnormal body movements of 2 months duration. Movements were described as
stiffening with arching of the back, rocking and twisting of the body with scissoring of the lower limbs [Figure 1] associated with grunting, hyperventilation, and sweating. She is said to be fully conscious [Figure 2] and responds to call during each episode which lasts between 1-5 min. These episodes were stereotyped and she had several episodes in a day. Movements are said to be occasionally stopped by gentle restraints and are not present during sleep. Mother denied history of sexual abuse. She was delivered at term with no complications and no history of developmental delay. She was seen initially at the Pediatric Outpatient Department and a diagnosis of epilepsy was made though, she had not been placed on anticonvulsants before referral to the neurology clinic. All other aspects of the history were not contributory. She is the only child in a monogamous family of nonconsanguineous marriage. The father was a university graduate while the mother was a university student. No family history of seizures or abnormal body movements. She had electroencephalography, serum electrolytes done before presentation which were all normal. A home video recording showed typical features consistent with gratification behavior [Video 1]. Childhood gratification disorder was diagnosed and mother was reassured, counseled, and advised to distract the child with interactive play during episodes; especially if it occurs in public places. She is currently being followed-up at the Pediatric Neurology Clinic with significant reduction in the frequency of episodes.

DISCUSSION

Gratification disorder is common in children, but could pose a diagnostic challenge in early childhood if the clinician is not aware of its possibility because unlike in adolescents, it does not usually involve manual genital manipulation and its clinical presentations are variable, therefore it could be wrongly diagnosed as epilepsy, nonepileptic paroxysmal movement disorder, or even gastrointestinal disorder like gastroesophageal reflux disease.[3] Our index case was initially misdiagnosed as epilepsy and she had electroencephalography done which was normal. This observation is similar to that of Nechay et al.,[1] in their review of 31 cases of masturbatory behavior in children found that majority of the patients were initially misdiagnosed with seizure disorder; while Fleisher and Morrison[6] in their case series, reported movement disorder as the commonest initially diagnosis. However, the typical clinical features in children as reported by Yang et al.,[7] include: (1) Onset after the age of 3 months and before 3 years; (2) stereotyped episodes of variable duration; (3) vocalizations with quiet grunting; (4) facial flushing with diaphoresis; (5) pressure on the perineum with characteristic posturing of the lower extremities; (6) no alteration of consciousness; (7) cessation with distraction; (8) normal examination; and (9) normal laboratory studies. Our patient manifested most of the features highlighted by Yang et al.[7]

Videotaping of these episodic events is invaluable in the diagnosis of gratification behavior because parent may use the wrong descriptive terminology for some of these postural features, therefore giving semblance to seizure disorder, movement disorder, or gastrointestinal disorder. The diagnosis was made possible only after the video clip was seen in our patient. Therefore, clinicians should form the habit of requesting video clips for neurologic disorders that involve seizures or movement disorders.

Treatment usually involves counseling and educating the parents for them to understand that it is a normal behavior in children and that they will often outgrow it. Therefore, scolding the child could result in positive reinforcement of such behavior and low self-esteem; rather they should be gently talked to on the need to avoid such behaviors especially in public places, then subsequently even in privacy. Furthermore, attempts
could be made to engage the child in other play activities which could redirect their attention from masturbatory activities.

**CONCLUSION**

Gratification behavior is a normal behavior in children and they often outgrow it. Clinicians should be aware of its existence otherwise it could be misdiagnosed as seizure, movement or even gastrointestinal disorder and videotaping of these episodic events are invaluable in making a correct diagnosis in neurologic disorders.

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