ECRONICON OPEN ACCESS

EC NEUROLOGY
Case Report

Incognizant Cause of Misdiagnosed Seizure

Saumya H Mittal*, Shivanand Pai, Rakshith KC, Misri ZK and Nisha Shenoy

Department of Neurology, KMC Hospital, Mangalore

***Corresponding Author**: Saumya H Mittal, Department of Neurology, KMC Hospital, Mangalore.

Received: August 22, 2016; **Published:** September 13, 2016

Abstract

Rate of misdiagnosis of epilepsy is high. In a study, 23% patients were found to have been misdiagnosed as epilepsy and 26% patients referred as refractory epilepsy were misdiagnosed. Among children with falls and funny turns, 23% have seizures while 42% patients had syncope (of different causes) and 35% had myriad of causes. 39% children diagnosed to have epilepsy were misdiagnosed. We present a misdiagnosed case of seizure disorder that turned out to have Gratification Disorder, a cause that is not commonly known beyond paediatric department and which confuses neurologists since it mimics epilepsy and movement disorder.

Keywords: *Epilepsy; Seizures; Gratification behaviour; Infantile masturbation*

Introduction

Rate of misdiagnosis of epilepsy is high. In a study, 23% patients were found to have been misdiagnosed as epilepsy and 26% patients referred as refractory epilepsy were misdiagnosed. Significant similar data in children is lacking in children [1]. Hindley., *et al*. in his work suggested that 23% of the children had seizures while 42% patients had syncope (of different causes). Other causes were relatively less common [2]. As per Uldall., *et al*. 39% children diagnosed to have epilepsy were misdiagnosed [3]. We present a case of a similarly misdiagnosed epilepsy with a cause that is not commonly known beyond paediatric department. The condition confuses neurologists since it mimics either epilepsy or a movement disorder [4].

Case

A 15 months old girl presented to the hospital as a diagnosed case of seizure disorder. The child, born to a full term normal delivery had a good APGAR score. The mother had noted abduction and flexion movements of the lower limbs. The symptoms were usually associated with crying or increased respiratory rate. The child had the episode 5 to 6 times daily. The episode would usually stop without any subsequent altered sensorium. The child had been initiated on antiepileptics-phenobarbital, followed by carbamazepine. But the movements had subsequently not stopped. The child was therefore referred to neurology department for seizures. The child's mother had noted that the movements stopped when she picked up the child. The child was otherwise very active. A possibility of infantile masturbation was considered since prior EEG and CT scan were normal. The drug regimen was withdrawn.

Discussion

Masturbation has been a common human behaviour which is known to occur in 90-94% males and 50-60% females. Paediatricians are well aware of this behaviour in infancy and pre-adolescence. Infantile masturbation or gratification disorder has been known for a little over 100 years now, having first been reported in 1909. It may however be difficult to recognize in toddlers and infants due to absence of manual stimulation of genitals. It resembles other differential diagnosis like seizures, abdominal discomfort dyskinesias and dystonias

and therefore unrecognized gratification disorder may result into extensive and expensive workup and wrong initiation of treatment with antiepileptic drugs etc. [4-6].

Gratification disorder may be frequently seen in children after age of 2 to 3 months. Frequently, these children are deprived of tactile sensory domain. Our patient would stop the movements when picked up by the mother. This may be explained by this phenomenon. The other cause may be child sexual abuse. Many authors have considered other conditions like sleep disorders, genitourinary irritations, and even early weaning from breast feeding as a cause [4,6,7].

The patient may show adduction of thighs, eidetic imagery, grunting, rocking, sweating and occasionally twitching and pelvic thrusting. The lack of genital stimulation often confuses the physicians misleading them to diagnose a condition other than infantile masturbation. It may help the physicians if they consider that torsional posturing, rocking and cessation on distraction is uncommon in seizures. These children appear annoyed if interrupted. Some children display facial flushing, cyanosis, lip smacking, staring, shaking, pallor, giggling, and frightened appearance [4,5,7].

It also confuses movement disorder specialists when it resembles paroxysmal dystonic choreoathetosis [4].

This may become a habit when the child is bored or sleepy. No children have been reported to develop seizures subsequently. However, variations in behavioural manifestations may be noted as the child grows up. An association with ADHD may be noted as the child grows up. The lack of motor and cognitive abilities may preclude manifestation of ADHD in infants. Once diagnosed, the parents need to be counselled and educated about this normal behaviour. They should be informed that this can subside when the child is engaged in another activity in his environment [4,7].

Conclusion

Misdiagnosis of seizure is very common. The main reasons for this are:

1. Most frequently, diagnosis is based on history while the examination may be frequently normal.

2. The differential diagnosis of seizures is large and there is no confirmatory test for seizures. Frequently, the basic tests may simply be unavailable to a treating physician.

3. Physicians may either not have enough knowledge about differentials of the seizures, or may be apprehensive about missing a diagnosis of seizures thereby over diagnosing the syndrome [1].

It is important to avoid misdiagnosing or over diagnosing epilepsy. Wrong diagnosis can be detrimental. Many leisure activities, professional or educational prospects may be restricted. Patients are subjected to the side effects of the antiepileptic drugs. Correct diagnosis and treatment are denied, and in many cases patients may not need treatment. Only explaining the condition to patient or parents (like in our case) and reassurance may be needed [1,3].

In children, the diagnosis of seizure should be made by a specialist- a paediatrician trained in the expertise of epilepsy [8].

Gratification disorder should be considered as a differential diagnosis in a case suspected with seizures if the episodes develop between age of 3 months and 3 years with aforementioned signs and symptoms, lower limb posturing, normal examination and laboratory reports.

Bibliography

1. Ferrie CD. "Preventing misdiagnosis of epilepsy". *Archives of Disease in Childhood* 91.3 (2006): 206-209.

2. Hindley D., *et al*. "Diagnoses made in a secondary care ''fits, faints, and funny turns'' clinic". *Archives of Disease in Childhood* 91.3 (2006): 214-218.

3. Uldall P., *et al*. "The misdiagnosis of epilepsy in children admitted to a tertiary epilepsy centre with paroxysmal events". *Disease in Childhood* 91.3 (2006): 219-221.

4. Mohammedreza Salehi Omran., *et al*. "Infantile Masturbation and Paroxysmal Disorders". *Indian Journal of Pediatrics* 75.2 (2008): 183-185.

5. A Nechay., *et al*. "Gratification disorder (''infantile masturbation''): a review". *Archives of Disease in Childhood* 89 (2004): 225-226.

6. Tomislav Franić & Ivana Ujević Franić. "Infantile masturbation - exclusion of severe diagnosis does not exclude parental distress - case report". *Psychiatria Danubina* 23.4 (2011): 398-399.

7. Mohammed M Jan., *et al*. "Long-term Outcome of Infantile Gratification Phenomena". *The Canadian Journal of Neurological Sciences* 40.3 (2013): 416-419.

8. NICE. "The epilepsies: The diagnosis and management of the epilepsies in adults and children in primary and secondary care: Pharmacological Update of Clinical Guideline 20". National Clinical Guideline Centre (UK) (2012).

Volume 3 Issue 4 September 2016