

Case Report

HYPERMOTOR SEIZURE PRESENTING WITH UNUSUAL PSYCHIATRIC SYMPTOMS - A CASE REPORT

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ABSTRACT

We report a case of hypermotor seizure activity. The patient presented behavioural changes with previous reports of normal electroencephalogram (EEG). A prolonged video EEG of this patient showed rare epileptic abnormalities over the left frontocentral region, which ruled out a conversion disorder diagnosis. Management using Antiepileptics proved beneficial in this case.

Keywords: hypermotor seizure, unusual symptoms, psychiatric

INTRODUCTION

Hypermotor seizures (HMS) are primarily characterised by complex behaviour involving proximal segments of the limbs and trunk, producing pedalling, kicking, pelvic thrusting or rocking movements.^{1,2} This seizure behaviour can be triggered by epileptogenic foci in the frontal lobe^{3,4}, the temporal lobe⁵, or the insular lobe.⁶ Here, we discuss an unusual presentation of hypermotor seizures misdiagnosed multiple times as conversion disorder and treated for the same.

CASE DESCRIPTION

A 19-year-old boy was presented to the Psychiatry department with the history of episodes in which he becomes scared suddenly and will feel that his surroundings are not real. These episodes have been present since he was ten years of age. Parents noticed that whenever the patient was having an episode, he would stay still for some time and then continue playing. He would have 1-2 episodes/month with each episode lasting only for a few seconds. A neurologist was consulted, and an Electroencephalogram (EEG) was done. The reports of which were told to be normal. There was no past or family history of any seizure.

These episodes continued, but by the end of high school, the patient started having symptoms in which he would feel scared suddenly, and he will scream and pace around aimlessly for a few seconds. After the episodes, he would not remember what has happened. These episodes continued with a frequency of 2-3 / month. He then started college, but he stopped going to college within three months because of similar episodes. The patient then started reporting low mood, feeling useless in life, hopelessness and passive death wishes. The patient was again taken to a neurologist, who ordered video EEG which had only non-specific changes. The patient was unwilling to go back to college. The patient was taken to a psychiatrist who started him on Risperidone 3mg, Mirtazapine 7.5mg, Sodium Valproate 500mg, and a diagnosis of Psychogenic nonepileptic seizure (PNES) were made. But there was no improvement with the medications. After stopping all the medicines, he maintained well until three months ago when he again started having similar episodes at night. Parents reported that while the patient was asleep in his bed all of a sudden, they hear a scream from the patient's room, and they find him pacing around the

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room or rolling on the bed continuously for a few seconds. When they tried to restrain him, they felt his body stiff and reported that it required significant effort to hold him down. The frequency of these night episodes had increased during the last three weeks. Finally, one day, the patient had an episode while talking to a neighbour outside his house about his academics. He felt fearful, cried out loudly and ran home in the middle of the conversation.

At the department, while waiting outside, he had an episode in which he made a loud cry and started pacing around the corridor which lasted for a few seconds. The patient looked perplexed and could not remember the event. The patient was admitted to the ward and was given IV lorazepam to pacify him. The patient also reported experiencing low moods, decreased sleep, hopelessness, and helplessness during the previous 1 month. A provisional diagnosis of Dissociative disorder was kept. A neurology opinion was taken and was advised 12-hour Video Electroencephalogram (VEEG). The record showed a mild degree of non-specific electrical dysfunction over the left frontotemporal region and rare epileptic abnormalities over the left frontocentral region. Recorded 14 habitual electroclinical events were suggestive of hypermotor seizures along with an aura of fear.

After loading with Lacosamide 400mg, then with Leviteracem 1h, his seizures decreased. However, he continued to have similar events. He was loaded with IV Fosphenytoin 1.5 gm, following which he did not have any events, and repeated prolonged EEG did not reveal any epileptiform abnormality or events. A diagnosis of hypermotor seizure originating from the frontal-temporal and frontocentral area was made. The patient was initially started on carbamazepine, on which he developed rashes, so it was stopped, and the neurologist started phenytoin 300mg. Since he continued to have episodes, Lacosamide 400mg was added. Since he developed further episodes, a third AED, Brivaracetam 100mg, was added. Escitalopram 10mg was started for his depressive symptoms. After discharge from the hospital, the patient did not have any further episodes and maintained well for the last six months.

DISCUSSION

Here we present a rare case of hypermotor seizures that masqueraded as a dissociative seizure for a prolonged period in a young individual, starting from childhood.

HMS is characterised by complex high amplitude movements involving the body's proximal segments, resulting in violent body movements like beating, kicking, screaming, boxing, and pelvic thrusting.⁷ Previous literature shows how challenging it is to diagnose frontal lobe epilepsy from dissociative seizures.⁸ Due to bizarre characteristics, quick postictal recovery happens with preserved consciousness. Absence of a clear cut ictal pattern in scalp EEG often results in misdiagnosis as dissociative seizures.⁸ Sleep-related hyper motor seizures are often misdiagnosed as NREM arousal disorders (e.g. sleepwalking, sleep terror).⁹ Some affective psychic seizures might involve complex distortion of perception of time, self and surroundings may cause subtle changes in consciousness, reduction in awareness and responsiveness.⁹ In our patient, though symptoms started at childhood with day time episodes of feeling scared and unreal, the motor component developed later on. The initial presentation was only during the daytime, and later on, the patient started having both day and night episodes which make the presentation of hypermotor seizures more unusual. Though the patient had undergone multiple EEGs, a prolonged Video EEG would have captured the semiology.

Psychological factors cause dissociative motor disorder as conflicts or other stressors precede the illness.¹⁰ Interestingly, none of the symptoms reported in this patient had any indication that this might be a seizure with the root cause in the brain, especially at onset and the type of symptoms being experienced. These symptoms were associated with significant stress and other mood symptoms. Unfortunately, none of the EEGs performed in the past showed any findings suggestive of brain pathology. This might be attributed to deep-seated pathology, treatment with valproate, or not doing a prolonged video EEG to capture an event.

CONCLUSION

Epilepsy includes a variety of neuropsychiatric symptoms. Misdiagnosis may be more common in patients with gait and movement disorders and those with a psychiatric history. Psychiatrists must be aware of these varied presentations while obtaining medical history to investigate and manage these patients effectively. Maintaining a high index of suspicion and judicious anticonvulsant therapy in suitable candidates would be beneficial in such situations.

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