

**AN INTERESTING CASE OF CATATONIA**

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ABSTRACT

Catatonia is an interesting manifestation of various medical and psychiatric conditions, which is less often diagnosed and treated. With many developments in the management of catatonia, early diagnosis makes it possible to keep the patient in remission. Here we report a case presenting with catatonia. This is to highlight the importance of a medical cause of seizures presenting with catatonia and its response to therapy with lorazepam.

KEYWORDS: Catatonia, seizures, lorazepam, risperidone, diagnostic criteria of catatonia.

INTRODUCTION

Catatonia is an interesting syndrome with a varied underlying diagnosis ranging from psychiatric to medical conditions. Appropriate diagnosis and prompt management is the key to the relief of the symptoms and remission. This is a report of a medical condition presenting with catatonia with complications which was diagnosed with its response to lorazepam. The presentation, diagnosis and management of this case have been discussed along with some insight into catatonia.

CASE DISCUSSION

A 55 yr old male was brought to the hospital by his relatives in an unresponsive state for the past 2 days. He had no history of fever, vomiting, loss of consciousness, seizures, head trauma, loose stools or cough. There was a specific history of chronic starvation for the past 4 months and that he did not entertain outsiders. There was also a history of speech articulation problem since birth along with loss of vision in right eye due to a trauma sustained.

He was not a known diabetic/ hypertensive/ asthmatic/ epileptic. He had no history of tuberculosis or contact. He was an infrequent smoker and consumed alcohol occasionally. Patient was evaluated outside and given an injection 4 days back for similar complaints after which he is said to have regained consciousness, the details of which are not known.

On examination, patient was ill nourished and head was in an extended posture with the presence of spontaneous eye movements. Glasgow Coma Scale Examination showed a score of 6 on 15. He was hemodynamically stable and his examination of cardiovascular, respiratory systems and abdomen revealed no significant abnormality. Central nervous system examination was done which showed the patient to be hypertonic, but reflexes were normal and bilateral plantar was flexor. It prompted us to look further and catatonia with Gegenhalten phenomenon was made out. He also had waxy flexibility and catalepsy (FIGURE 1&2). His higher mental functions, sensory system, cerebellar functions, posterior column and release signs could not be tested initially at first presentation and later was found to be normal after the patient recovered from the state of catatonia. Both the carotid pulses were palpable and there was no significant neck stiffness.



FIGURE 1: Patient showing waxy flexibility.



FIGURE 2: Catalepsy.

His renal, liver functions and electrolytes were within normal limits. Complete hemogram was normal. C- reactive protein levels were increased alongside positive urine ketones, likely due to the starvation. GTT and Hb A1c were found to be normal.

Further investigations of NCCT and MRI Brain revealed age related changes. Lumbar puncture showed no abnormality. Serial blood cultures were negative and Mantoux, non-reactive.

A working diagnosis of catatonia causing starvation ketoacidosis was made and he was admitted in the ICU and given IV fluids along with Ryles tube feeding. Ketoacidosis resolved in 2 days and he was started on Intravenous antibiotics. Patient responded to Inj. Lorazepam 2mg IV Q6h and Tab. lorazepam 1mg PO tds. Sustained response to benzodiazepines was seen only after 2 days of treatment. Patient was then shifted to the ward and later MMSE was done. Risperidone 4mg was added at night and Tab. Lorazepam tapered.

Recurrent episodes of similar presentation was observed on tapering the dose of lorazepam. An early presentation of schizophrenia was considered initially and later was reevaluated due to recurrent episodes of catatonia on lorazepam withdrawal. Further investigations were pursued and EEG revealed diffuse sharp waves, indicating late onset seizure disorder presenting as catatonia. The dose of lorazepam was titrated and phenytoin was added which helped the patient to be in sustained remission on follow up.

DISCUSSION

Catatonia, is a syndrome of acute or chronic course caused by a wide range of medical/neurological conditions or psychiatric illness, typically manifested by affective, behavioural, cognitive and motor symptoms.^[1] Karl Kahlbaum was the first to introduce this concept in 1863.^[2] The epidemiology of catatonic manifestations is not very clear. Being largely underdiagnosed, prevalence rates have been consistent with the studies done over the past 100 years. Among psychiatric inpatients, a study conducted by Fein and Mc Grath in 1990 showed 66% of patients have catatonia with the primary diagnosis of a maniac disorder. In 2000, Lee et al, showed that 15% of hospitalized psychiatry patients developed catatonia.^[3] The common association of it with schizophrenia, shows a prevalence of around 5-15% among schizophrenic cases.^[4] This syndrome is known to be occurring primarily due to a psychiatric illness and secondarily due to other disorders. It can be of the malignant or non-malignant or delirious types.^[5] In a study conducted by Primavera et. Al, 14% of catatonic patients were shown to have seizure activity.^[6] Though there have been studies trying to correlate catatonia and seizure disorders, there has been a lacuna in either the clinical description or EEG recording.^[7]

Catatonia can be explained due to a deficiency of GABA in the brain manifesting mainly with the motor symptoms and also by a sudden block in the action of dopamine which is explained by the response of patients treated with benzodiazepines and also the effects of antipsychotics respectively.^[2] In fact, there have been few cases of catatonia reported because of clozapine withdrawal.^[8]

Patients present with motor manifestations, mutism and negativism. There have been many rating scales to establish an appropriate diagnosis of catatonia, of which Bush-Francis scale has been observed to be with lesser variability. It includes: mutism, excitement, posturing/catalepsy, immobility/stupor, staring, grimacing, echolalia/echopraxia, stereotypies, mannerisms, verbigeration, rigidity, negativism, waxy flexibility, withdrawal, impulsivity, automatic obedience, mitgehen, gegenhalten, ambitendency, grasp reflex, perseveration, combativeness, autonomic abnormality.^[9] It is used as a scale for screening as well as for rating the severity. Each criterion is rated on a score of 0-3.

The common causes for catatonia include schizophrenia, mood disorders, hysteria, temporal lobe epilepsy, antipsychotic withdrawal, metabolic disorders like hyponatremia, Wilson's disease, Tay Sach's disease, neuroleptic malignant syndrome or due to idiopathic reasons.^[2] Seizure activity is the one of the commonest medical causes of catatonia, the prevalence of which has not been established clearly.^[5] It should be differentiated from akinetic mutism, abulia, locked-in-syndrome and hypoactive delirium. The investigations for catatonic manifestations are done to mainly rule out organic causes and conditions simulating catatonia.^[5]

Treatment of catatonia has shown a lot of variety and good response to different agents in the cases reported so far. Benzodiazepines are first line of management of this syndrome and includes lorazepam usually which may respond to a single dose or after 48hrs.^{[2][10][11]} Electroconvulsive therapy is used in lethal cases as the first line of management or as an adjunctive treatment option. Patients respond well to ECT and show prolonged remission rates.^[12] The other drugs include memantine, which acts on the NMDA receptors and increases both GABA and dopamine, which are deficient in catatonia.^[13] Risperidone is another drug, an antipsychotic which has been shown to provide prompt and sustained effect in its treatment of psychiatric conditions producing catatonia.^[14]

Because of the fact that antipsychotic drugs are among the drugs of choice to treat catatonia, we tried to taper lorazepam and add adequate antipsychotic therapy. But inspite of adequate compliant therapy with risperidone, patient had a recurrence which prompted us to look for a medical condition precipitating the catatonia, which was a non convulsive seizure as a cause. Supportive measures like maintaining hydration, diet and nursing care along with an occupational therapist helps in appropriate care and treatment of catatonia. The prognosis of catatonia is good with sustained maintenance treatment, though it depends on the underlying primary disorder.^[3]

CONCLUSION

Catatonia, a common but underdiagnosed condition must be evaluated to find out the primary cause of presentation. Though psychiatric causes account for most of the cases, medical causes must be ruled out before a psychiatric diagnosis is established. The most common of medical causes includes seizure disorders, which can be evaluated by a simple test of EEG and therapeutic trial. This was a case report being presented in view of its uniqueness and it stresses the need for a careful search of medical conditions in all psychiatric ailments.

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