

Introduction

Catatonic schizophrenia is a rare and severe mental disorder primarily defined by unusual and pronounced motor behaviors. These can range from greatly reduced voluntary movement to extreme hyperactivity and agitation. In some instances, individuals with this condition might become almost completely immobile, holding statuesque positions for extended periods, sometimes for hours or even days.

Case Description

A 60-year-old Chinese woman with a history of schizophrenia, maintained on monthly intramuscular clopixol 200mg, presented with a one-day history of unresponsiveness. There were no associated symptoms such as fever, chest pain, weakness, or falls. Upon initial assessment, she remained unresponsive with a Glasgow Coma Scale (GCS) of E1V1M1 (3/15). Despite this, her vital signs were stable. Interestingly, occasional crying, lip smacking, and movements of her head and hands were observed. Neurological examination revealed profound weakness, with bilateral upper and lower limb power rated 0/5. She also exhibited hypotonia and normoreflexia (reflexes 2+), with no clonus. All routine blood investigations and a CT scan of the brain returned normal results, ruling out common organic causes for her unresponsiveness. Given her presentation, a trial of intravenous midazolam was administered (1-2 mg every 2-3 hours).

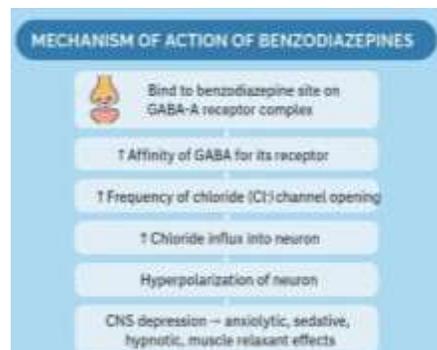
Following this, a notable improvement in her GCS was observed, reaching E3V2M5. She became able to obey simple commands, though occasional crying persisted. Based on her clinical picture and positive response to benzodiazepines, a diagnosis of catatonic schizophrenia was made. She was reviewed by psychiatric team and admitted for close monitoring of her GCS and for potential electroconvulsive therapy (ECT).

Discussion

Catatonic schizophrenia is a syndrome characterized by motor abnormalities like purposeless activity, immobility and posturing, together with disturbances of consciousness. Three of the twelve symptoms must be present; Catalepsy, Waxy flexibility, Stupor, Agitation, Mutism, Negativism, Posturing, Mannerisms, Stereotypies, Grimacing, Echolalia, and Echopraxia

Neuronal pathways mediated by the neurotransmitter gamma-aminobutyric acid (GABA) are believed to play a central role in the integration of emotional and cognitive functions. Catatonic symptoms are postulated to arise from dysregulation in these pathways. Benzodiazepines potentiate GABAergic activity and are believed to counteract the GABAergic dysregulation underlying catatonic symptoms.

Figure 1: shows mechanism of action of benzodiazepine



Conclusion

Common treatment for catatonia is by using Lorazepam, which is a benzodiazepine drug, and electroconvulsive therapy (ECT). If left untreated, Complications can include aspiration pneumonia, dehydration, embolisms, pressure ulcers, and malnutrition

Reference

- 1) <https://www.ncbi.nlm.nih.gov/books/NBK563222/>
- 2) <https://www.britannica.com/science/catatonia>
- 3) <https://pharmacyfreak.com/mechanism-of-action-of-benzodiazepines/>