Clinical Image

Prolonged mannerism as an isolated, interesting, and old symptom in a schizophrenic patient with poor response to clozapine: a clinical image

Running Title: Mannerism and clozapine

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Abstract

The concept of catatonia was first described by a German psychiatrist, Kahlbaum, in 1874. Catatonia is a serious neurological disorder associated with a wide range of psychiatric, neurological, medical conditions, and drug-induced disorders. Nevertheless, there is no absolute guideline for treating catatonia patients in whom the cause of the disorder is unknown. Clozapine is the first atypical antipsychotic used for the treatment of catatonia. Our case was a 51-year-old single, right-handed man with schizophrenia and a specific symptom of catatonia. Despite previous studies findings revealing the efficacy of clozapine in relieving catatonia symptoms, our patient did not show a definite response to this medication. Hence, follow-up of these patients to evaluate other treatments and possible incidence or manifest of other catatonic features like waxy flexibility, echo phenomenon, and negativism are suggested.

Keywords: Catatonia; Clozapine; Neurobehavioral manifestations; Schizophrenia

**Introduction**

Negative symptoms in schizophrenia, such as restricted affect, lack of insight and poor judgment, anhedonia, abulia, poverty of speech, and social withdrawal, are challenging to manage and are traditionally poor responsive to old antipsychotic agents. Recent studies have shown that clozapine is an effective modality for negative and positive symptoms of schizophrenia (1).

The prevalence is between 5-20% (approximately 10%). Of course, factors like the type of study, various regions, and different methods have a major role in estimation (2)

The prevalence of catatonia in psychiatric hospitals of India is 13.5% (3).

We did not find an epidemiologic study about it in Iran. In this study, we reported a single prolonged catatonic sign in a patient with low social support.

**Case presentation**

Our case was a 51-year-old single man who was diagnosed with schizophrenia. He was hospitalized at a psychiatric care center in Yazd, Iran, at the study time. He did not respond significantly to various treatments, including electroconvulsive therapy (ECT) and pharmacotherapy. He also showed drug resistance to end lines treatments like clozapine.

The patient had mental retardation and positive family history of schizophrenia. He lived in exile a few years ago. He also suffered from negative symptoms, such as poverty of speech, poverty content, social isolation, impaired self-care, dereism, and poor eye contact. He only said two words, namely ding Ms. and Mumbai. One of his predominant behavioral symptoms was military saluting (Figure 1).

![Figure 1. Military saluting as a catatonic sign](image)

Drugs prescribed for the patient included chlorpromazine, risperidone, and clozapine (Table 1). However, our case did not significantly improve after taking these drugs, while several studies reported that catatonia symptoms improved following the administration of clozapine (4).

**Discussion**

Clozapine has been shown to improve the symptoms of catatonia in most cases. One of these cases was a 26-year-old patient with schizophrenia admitted to a psychiatric ward one week after abrupt discontinuation of clozapine due to catatonia. Two days after the resumption of clozapine (alone), the patient was recovered, revealing the efficacy of clozapine in relieving the symptoms of catatonia (2). In another case, a 49-year-old woman with recurrent schizophrenia-related catatonia was followed up for 15 years. She initially took haloperidol, quetiapine, loxapine, and risperidone, but her disease was
recurred several times in the early years of treatment. When her medication was changed to clozapine, she eventually was recovered (1).

Based on the previous two case studies, it can be concluded that clozapine may have a beneficial effect on reducing the symptoms of catatonia. However, our case did not have any significant improvements even following clozapine administration. This discrepancy can be attributed to drug interactions or resistance to clozapine. Further studies are needed to support or reject the efficacy of clozapine in the improvement of catatonia symptoms.

**Conclusion**

Some catatonic symptoms may be long-lasting and poorly responsive to clozapine in catatonic patients.

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**References**