

Flupentixol Induced Bilateral Upper Limb Rigidity in A Schizophrenia Patient

Urmila Kumari¹, Neena Bhatti², Prabhjot Kaur³, Girish Joseph^{2*}, Dinesh Badyal⁴, Chetan Sharma²

¹Student, Phase III Part 2, Christian Medical College & Hospital, Ludhiana.

²Assistant Professor, Department of Pharmacology, Christian Medical College & Hospital, Ludhiana.

³Pharmacovigilance Associate, AMC, Christian Medical College & Hospital, Ludhiana.

⁴Professor & Head, Department of Pharmacology, Christian Medical College & Hospital, Ludhiana.

*Corresponding author: Girish Joseph.

Abstract

Background: Flupentixol, a typical antipsychotic, is primarily used in management of Schizophrenia. Common adverse effects include drowsiness, lethargy, mental confusion, weight gain, seizures, postural hypotension, palpitation, Q-T prolongation, cardiac arrhythmias, dry mouth, blurred vision, constipation, and urinary hesitancy. More severe side effects include extrapyramidal disturbances. This case reports a relatively uncommon side effect in the patient after Flupentixol administration - Bilateral upper limb rigidity.

Methods: This case was collected from Psychiatry out-patient department as a part of Pharmacovigilance elective under the Department of Pharmacology, CMC Ludhiana, which is an ADR Monitoring Centre.

Conclusion: This case underscores the importance of monitoring patients on Flupentixol for bilateral limb rigidity. Further research is needed to understand the mechanisms behind this unusual presentation and to develop strategies for prevention and management.

Keywords: flupentixol; bilateral limb rigidity; schizophrenia; ADR

Introduction

Flupentixol, also known as flupenthixol, is a typical antipsychotic drug of the thioxanthene class. It is primarily used in the treatment of schizophrenia [1,2]. It is available in various formulations, including oral tablets and long-acting intramuscular injections. Flupentixol acts as an antagonist of both D1 and D2 dopamine receptors [2]. Overactivity of dopamine in the brain is thought to cause psychotic illnesses, and flupentixol blocks the receptors that dopamine acts on, thereby preventing this overactivity. Blockade of dopaminergic projections to the temporal and prefrontal areas constituting the 'limbic system' and in mesocortical areas is responsible for the antipsychotic action [1,3]. Flupentixol is indicated for the management of chronic schizophrenia in patients whose main symptoms do not include excitement, agitation, or hyperactivity [3]. Common adverse effects include drowsiness, lethargy, mental confusion, weight gain, seizures, postural hypotension, palpitation, Q-T prolongation, cardiac arrhythmias, dry mouth, blurred vision, constipation, and urinary hesitancy. More severe side effects include extrapyramidal disturbances (EPS) [1,3].

EPS are among the most frequent adverse medication reactions that patients encounter when using dopamine-receptor blocking medicines such as flupentixol. These include more chronic forms of tardive akathisia and tardive dyskinesia as well as more acute symptoms such as dystonia, akathisia, and parkinsonism⁴. A randomized controlled trial done in 2014 reported only 0.6% of the patients having muscle rigidity.⁵ According to Vigiaccess database, there are only 3760 ADRs reported with this active ingredient of which just 1.25% are of muscle rigidity [6]. Moreover, there have been very few, far and wide similar cases reported. Hence, this case was worth reporting.

Case Report

This case involves a 51-years-old gentleman, a known case of Schizophrenia. He was taking Tab. Flupentixol 0.5 mg oral thrice daily for past 6 months for negative symptoms of schizophrenia. According to the patient his symptoms were reduced after taking the drug. After six months of taking the medication, he suddenly started experiencing muscle rigidity in both of his upper arm which progressed to involve both his

upper limbs. When the rigidity increased in severity, he reported to Christian Medical College Ludhiana outpatient department with complaints of severe bilateral upper limb rigidity throughout the range of motion. After a psychiatric consult the drug Flupentixol was withdrawn, following which the patient recovered in a few days. The Naranjo's score was 5 (probable) and the World Health Organization (WHO) Uppsala monitoring Centre (UMC) causality assessment showed probable correlation with the current adverse event.⁷ Initially, the patient was considered to have an extrapyramidal disorder, however it was later ruled out after neurological examination as the patient did not have any other symptoms related to extrapyramidal disorder.

Discussion

Flupentixol is indicated for the management of chronic schizophrenia in patients whose main symptoms do not include excitement, agitation, or hyperactivity [1,3]. It is also used in other psychoses, particularly in withdrawn and apathetic patients [1]. In addition to its use in schizophrenia, flupentixol has been marketed to manage symptoms of depression in patients who may or may not exhibit signs of anxiety³. Like all medications, it has potential side effects that can range from common to rare. Any unfavorable medical event that could result from using a pharmaceutical product is classified as an adverse event, even though there isn't always a direct link between therapies. An adverse drug reaction (ADR) occurs when there is a causal link between the drug and the adverse event occurrence⁸. Flupentixol is effective and well tolerated in patients of chronic schizophrenia⁹. In a study conducted by Grohmann et.al comparing Flupentixol to haloperidol and common second-generation antipsychotics (SGAs), Flupentixol was found to have better safety in the treatment of schizophrenia.¹⁰ Elyasi et.al reported development of Neuroleptic Malignant Syndrome in a patient with a history of schizoaffective disorder (SAD) on Flupentixol [11]. In a case report, Agarwal et.al have discussed development of Tardive dystonia in a patient of long-term use of Flupentixol [12]. All of these above conditions mentioned are characteristic of extrapyramidal disorders, which have always been a focus whenever a typical antipsychotic like flupentixol has been prescribed. There is scant data on symptom of limb rigidity presenting solely as a symptom of flupentixol. Therefore, this indicates

the need for further research to understand the mechanisms behind this unusual presentation and to develop strategies for prevention and management.

Conclusion

Flupentixol plays a significant role in the management of schizophrenia, particularly in patients whose main symptoms do not include excitement, agitation, or hyperactivity. It is important to be aware of its potential side effects; yet very few adverse events have been reported with the suspect drug and rarer is the reporting of bilateral limb rigidity.

Declarations

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Conflict of interest

There is no conflict of interest

Consent

Informed consent was taken from patient for publication of this case report.

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