

**A RARE CASE - PROCHLORPERAZINE-INDUCED ACUTE DYSTONIA PRESENTING AS OCULOGYRIC CRISIS IN A 24-YEAR-OLD FEMALE****Dr Neerupreet Kaur Dhillon**

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ABSTRACT Prochlorperazine (stemetil) is commonly used medication to treat nausea and vertigo. This case report shows the importance of cautious medication use, particularly with dopamine antagonists like Stemetil (prochlorperazine). we present a case of 24/f who developed extrapyramidal symptoms (EPS) of (acute neck dystonia torticollis and acute oculogyric crisis), after receiving Stemetil for vertigo, causing patient severe distress, emphasizing the need for careful monitoring and prompt recognition of adverse effects. The patient got agitated due to symptoms and was referred to psychiatric liaison in view of new symptoms. This report highlights the side effects of stemetil and as well as consideration of alternative medications and be vigilant for drug-induced EPS.

KEYWORDS : Prochlorperazine, Oculogyric Crisis, Neck Dystonia, Torticollis, Extrapyramidal**INTRODUCTION**

Prochlorperazine (Stemetil), is widely prescribed for the management of nausea, vomiting, severe anxiety, and certain psychiatric conditions [1]. While generally effective, it is not without potential adverse effects. Recognizing and understanding these side effects is essential for both primary care physicians and emergency healthcare providers, particularly given the medication's frequent use in acute care settings. This report draws attention to the potential and rare side effects of prochlorperazine through a case of oculogyric crisis and neck dystonia - rare but significant adverse reactions that can occur with its use [2]. By presenting this case, we aim to increase awareness about the recognition, management, and prevention of such nervous system complications associated with psychiatric medications, ultimately contributing to improved patient safety and clinical outcomes.

CASE PRESENTATION

A 24-year-old female college student presented to the medicine outpatient department with a two-day history of persistent nausea, vomiting, and dizziness that subsided only with rest. She had no prior medical history and had not sought previous treatment. On examination, her vital signs were stable, and all routine investigations were within normal limits. The treating physician prescribed prochlorperazine 5 mg intramuscularly three times daily, and she was admitted to the hospital. Following the administration of injections at 9:30 AM and 3:00 PM, her symptoms initially improved. However, at approximately 4:30 PM, she became acutely distressed, reporting an inability to move her neck, which was fixed in a rightward, twisted position, and a sustained upward gaze. The patient was visibly agitated and in severe discomfort, unable to alter her posture or eye position despite all her efforts. Given her agitation and abnormal movements, a psychiatry consult was requested. Upon evaluation, her symptoms were identified as oculogyric crisis and neck dystonia, likely induced by prochlorperazine. A detailed history confirmed no prior exposure to neuroleptics or antiemetics. The medication was immediately discontinued, and she was treated with intramuscular promethazine and benzodiazepines (oral), accompanied by reassurance. Over the next 1-2 hours, her symptoms resolved completely, with marked clinical improvement observed and she was able to move voluntarily. Hence, the symptoms were identified as adverse symptoms due to prochlorperazine administration.

CONCLUSIONS

This case illustrates a rare but significant adverse reaction to prochlorperazine-oculogyric crisis accompanied by cervical dystonia (torticollis). Prochlorperazine, a first-generation antipsychotic, is commonly utilized in clinical practice for its antiemetic and antipsychotic properties. Various studies like Wong et al and Muench et al discussing pharmacological role of prochlorperazine, concluded that its therapeutic effects are primarily mediated through antagonism of dopamine D₂ receptors in the central nervous system. Additionally,

prochlorperazine exhibits affinity for other neurotransmitter receptors, including histaminergic (H₁), adrenergic (α_1), and muscarinic receptors, contributing to its diverse pharmacological profile and side effect spectrum [3-4].

Oculogyric crisis (OGC) is characterized by a sustained, involuntary upward deviation of the eyes, often accompanied by neck muscle contractions leading to torticollis. This dystonic reaction is typically acute in onset and can be distressing for patients. While OGC is more commonly associated with high-potency neuroleptics, it can also occur with other dopamine antagonists used for gastrointestinal and vestibular symptoms, such as metoclopramide and levosulpiride.

In this case, the patient developed OGC and torticollis following intramuscular administration of prochlorperazine, highlighting the need for clinicians to be vigilant for such extrapyramidal side effects, even when using the medication for non-psychiatric indications like vertigo. Prompt recognition and management, including discontinuation of the offending agent and administration of anticholinergic or antihistaminic medications, are essential for symptom resolution and patient comfort.

This report serves to raise awareness among primary care physicians and other healthcare providers about the potential for serious dystonic reactions with prochlorperazine and similar agents, emphasizing the importance of monitoring for such adverse effects, especially in patients without prior exposure to dopamine antagonists.

CONCLUSIONS

This case emphasizes the need for clinicians to be aware of the potential for drug-induced extrapyramidal symptoms (EPS) when prescribing dopamine antagonists such as prochlorperazine, especially in settings where it is commonly used for nausea and vertigo. Inadequate recognition of these side effects can lead to misdiagnosis as psychiatric conditions like hysterical disorders, factitious disorder, or dissociative disorders, resulting in inappropriate treatment. Accurate diagnosis relies on thorough clinical evaluation and a detailed medication history to prevent unnecessary interventions and complications. Careful consideration of dosage and potential alternatives is essential to minimize the risk of adverse reactions, particularly in patients without previous exposure to neuroleptics. Incorporating this awareness into clinical practice can help prevent unnecessary interventions and ensure appropriate management of such adverse reactions.

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