

Case Report

Trifluoperazine induced blepharospasm: a case report

Indu Dhiman¹, Umesh Dhiman², Tarun Sharma^{3*}, Aradhna Sharma⁴

¹Department of Ophthalmology, Civil Hospital, Kangra, Himachal Pradesh, India

²Department of Surgery, Civil Hospital, Dehra, Himachal Pradesh, India

³Medical Specialist, Civil Hospital, Kangra, Himachal Pradesh, India

⁴Department of Pharmacology, Dr. Rajendra Prasad Government Medical College, Kangra at Tanda, Himachal Pradesh, India

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*Correspondence:

Dr. Tarun Sharma,

E-mail: tarunpgi@gmail.com

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ABSTRACT

We hereby report an unusual case of trifluoperazine (typical antipsychotic drug) induced tardive blepharospasm which was relieved subsequently after dechallenging the drug. Thereafter patient was started with clozapine (atypical antipsychotic drug). This possibility of blepharospasm should always be kept in mind while prescribing trifluoperazine.

Keywords: Adverse drug reaction, Blepharospasm, Trifluoperazine

INTRODUCTION

Typical antipsychotic drugs (1st generation) have more tendency to cause extrapyramidal side effects than atypical antipsychotic drugs (2nd generation). The extrapyramidal side effects reported with typical antipsychotic drugs include akathisia (motor restlessness), parkinsonism (characterised by rigidity) and dystonia.¹ Tardive dystonia, a form of tardive dyskinesia, is a movement disorder characterized by involuntary muscle contractions caused primarily by taking dopamine receptor blockers like antipsychotic medications.² Dystonia can affect different body parts, uncommonly involving the muscles of eye closure characterised by persistent intermittent closure of eyelids.¹ Blepharospasm is a focal tardive dystonia which renders the patient functionally blind and occupationally handicapped. Very few cases of trifluoperazine induced blepharospasm have been reported till far to best of our knowledge.³ Clinicians should be aware of this condition while prescribing trifluoperazine.

CASE REPORT

A 50 year female patient reported to eye OPD with complaint of progressive difficulty in opening her eyes for last one year. No past history of any other psychiatric/neurological/surgical illness could be elicited. Family history revealed nothing significant related to the present problem.

On repeated asking about history of any drug intake, patient told about intake of some medication for psychiatric illness. On reviewing the records patient was diagnosed with schizophreniform disorder 2 years back and was on treatment since then from some private hospital. Initially she was started with tablet stelazine 5 mg (trifluoperazine) twice/day which was further increased to 20mg/day within 6 weeks. She was on this maintenance dose for one and half year. While on treatment with this drug, after 1 year patient started having frequent and forceful blinking of her eyelids.

On general physical examination vitals were found normal and no other neurological deficit could be elicited. Routine laboratory investigations, ECG, EEG and brain imaging revealed nothing significant.

On ocular examination frequent spasm of bilateral orbicularis oculi muscles and corrugator muscles was seen causing forcible eyelid closure. Best corrected visual acuity was 20/20 in both eyes. Extra-ocular movements were full in both eyes. Bilateral pupils were of normal size and reacting normally to light. IOP was 12 mmHg. On slit examination anterior segment and posterior segment under dilatation was normal.

On the suspicion of drug induced side effect, physician and psychiatrist consultation was sought and patient was shifted to another atypical antipsychotic drug, Clozapine and trifluoperazine was tapered off. Initial dose of tab Clozapine started was 12.5 mg/day in two divided doses which was subsequently increased to 300 mg/day in divided doses within one month. The patient was kept on this maintenance dose for last 6 months and was on regular follow-up with us. Subsequently patient's symptoms were decreased to almost normal.

Table 1: Creatinine levels on different days.

Date	CPK
12-11-16	8581.4 U/L
15-11-16	5743.5 U/L
17-11-16	3078.8 U/L
21-11-16	5830 U/L

DISCUSSION

Tardive dyskinesia is a movement disorder mainly caused by typical antipsychotic drugs. Blepharospasm is a focal dystonia affecting eyelid closing muscles characterised by frequent blinking or sustained closure of the eyelids. Some patients with blepharospasm will have other focal dystonias involving nearby or distant muscles. Commonly, other muscles of the face will be involved, giving rise to abnormal movements of the eyebrows, forehead, lips jaw and tongue. In the present case only ocular muscles were involved sparing all other muscles. Trifluoperazine is a typical antipsychotic and considered good choice for the treatment for schizophrenia. All the typical antipsychotics are antagonists at D2 receptors and to varying extents at D1, D3 and D4 receptors and extrapyramidal effects come from their block of D2 at the nigrostriatal pathway. Trifluoperazine has high affinity for D2 receptors relative to D1 receptors.² A variety of adverse effects reported with this drug include sedation and weight gain, postural hypotension, constipation, Parkinsonism and sexual dysfunction but to a lesser degree than with other antipsychotics.⁴⁻⁶ Trifluoperazine has been known for its high propensity to cause extrapyramidal side effects, such as tardive dyskinesia and akathisia.⁷

Clozapine seems to be effective in approximately 30-61% of patients who are resistant to the typical antipsychotics.⁸ Clozapine is a significant D1 and D4 antagonist, and to a lesser extent a D2 antagonist. It is also a potent antagonist at some serotonin receptors. Clozapine improves both positive and negative symptoms having minimal acute extrapyramidal symptoms. The results of a number of clinical studies suggest that the use of clozapine is associated with lower rates of EPS.⁹ Clozapine rarely causes tardive dyskinesia and may even have a beneficial effect on pre-existing tardive dyskinesia¹⁰

The patients with blepharospasm and tardive dyskinesia can have same clinical appearance; however, tardive dyskinesia would only infrequently involve the muscles of eye closure. Therefore, unless the focal dystonia in the patient with blepharospasm has spread to involve the rest of the face, it ordinarily would not be difficult on clinical grounds to separate patients with blepharospasm and tardive dyskinesia. Both the conditions are difficult to treat and there is no systemic drug that works well in either condition.

CONCLUSION

It is very important to consider possibility of tardive blepharospasm in a patient on typical antipsychotic drugs. Clozapine could be a better alternative drug in such cases. Patient needs to be informed about possible side effects of drug and regular follow-up.

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