

**HALOPERIDOL INDUCED RABBIT SYNDROME****Dr. E. Akila* and Dr. R. Kavitha**

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ABSTRACT

Antipsychotic drugs (typical) induced extrapyramidal side effects includes movement disorders like dystonia, akathisia, tardive dyskinesia, Parkinsonism and very rarely rabbit syndrome (perioral tremors). Long term therapy is known to induce these disorders. Haloperidol is a potent typical antipsychotic used against delusion & hallucination and has increased propensity to cause extrapyramidal side effects. This case illustrates the extrapyramidal side effects like rabbit syndrome following treatment with haloperidol.

KEYWORDS: Haloperidol, Rabbit syndrome, ADR, Extrapyramidal symptoms (EPS).

INTRODUCTION

Adverse drug reactions (ADRs) hold special importance in healthcare as they account for 6% of total hospital admissions, increase in economic burden on healthcare system, withdrawal of drugs from market and death.^[1] Among the various ADRs, specific drug induced symptoms and signs hold a special caution. Haloperidol- a typical antipsychotic drug used for treatment of acute psychosis and other psychiatric illness is known to cause Extrapyramidal side effects.^[2] Antipsychotic drug induced extrapyramidal side effects includes movement disorders like dystonia, akathisia, tardive dyskinesia, parkinsonism and very rarely rabbit syndrome (perioral tremors).^[3-5] Rabbit syndrome is an antipsychotic-induced dyskinesia of the mouth, characterized by a fine, rapid, involuntary perioral motion that resembles the chewing motion of a rabbit.^[1-2] The oral movements occur in a vertical direction and can be differentiated from tardive dyskinesia by the lack of involvement of the tongue and by the rhythmic pattern.^[2] However, differentiation of tardive dyskinesia or parkinsonism from rabbit syndrome can remain difficult, as the latter may

present with features of the other conditions.^[4-5] Here we present a case of rabbit syndrome following a short term therapy of haloperidol.

CASE REPORT

58 years old female was admitted in hospital for mental agitation and aggressiveness. She developed auditory hallucinations, irrelevant talking, delirium. Psychiatrist opinion was obtained and she was diagnosed as organic psychosis. For which she was given Tab Haloperidol 0.5 mg bd for 1 week. With the initiation of treatment the clinical symptoms such as hallucinations and delirium was subsided. But on 3rd day of treatment, she has developed abnormal movements near her mouth which is more likely to be perioral tremors (Rabbit syndrome) which is one of the extrapyramidal syndrome. The clinical evaluation was done and the patient was advised to stop tab haloperidol. She was instructed to take Tab Trihexyphenidyl 2mg tds for control of rabbit syndrome and patient was switched over to atypical antipsychotic Tab Olanzapine 10mg once daily for 2 weeks. After 2 days of treatment, patient's perioral tremors was completely resolved.

DISCUSSION

The exact mechanism of rabbit syndrome remains unknown, and the literature suggests conflicting causes. For example, it has been suggested that rabbit syndrome may be similar to drug-induced Parkinson disease, whereby a hypercholinergic state arises secondary to dopamine blockade.^[2-3] Alternatively, it has been postulated that the mechanism is similar to that of tardive dyskinesia, being characterized by a state of cholinergic hypofunction due to dopaminergic hypersensitivity.^[2-6] The former hypothesis is supported by clinical evidence, as the symptoms of rabbit syndrome tend to disappear with anticholinergic treatment, whereas the symptoms of tardive dyskinesia tend to worsen upon treatment.^[7-9] Although physiologic and clinical differences do exist among rabbit syndrome, tardive dyskinesia, and parkinsonism, a clear diagnosis of rabbit syndrome can be difficult to confirm, as features of each condition may be present simultaneously.^[10] Haloperidol, 1st generation butyrophenone, typical anti-psychotic, dopaminergic receptor antagonist that blocks specific D2 receptors in the brain known to cause extrapyramidal side effect – rabbit syndrome after prolonged therapy. The mechanism for development of rabbit syndrome after short term therapy here is not clearly understood.

The main diagnostic features that differentiate rabbit syndrome from other extrapyramidal syndromes are its high specificity to the buccal region and the lack of lingual involvement.^{[9-}

^{10]} Fortunately, rabbit syndrome appears readily treatable by reducing the dose of the offending antipsychotic, and it typically resolves within several days of treatment with an anticholinergic agent.^[8-10] Several studies have noted that switching to atypical antipsychotics with stronger anticholinergic properties, such as olanzapine, clozapine, and quetiapine, may be an alternative to using anticholinergics.^[10] This strategy has the additional benefit of simultaneously treating the underlying disorder.

CONCLUSION

Haloperidol is effective and easy to use in controlling acute psychosis and combative states. However, it has serious adverse effect which should be kept in mind before prescribing until it weighs the benefit over other drugs. In this case report we suggest that haloperidol has the potency to produce extrapyramidal side effect even with short term therapy.

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