CASE REPORT

Haloperidol in Treatment Resistant Schizophrenia: A Case Report

Ridzwan H & Saifuddin TM
Jabatan Psikiatrik dan Kesihatan Mental, Hospital Tengku Ampuan Afzan, Kuantan Pahang, Malaysia

Abstract

A substantial percentage of patients will have an inadequate response to clozapine in treatment resistance schizophrenia. Therefore, different approaches need to be considered for managing this group of patients. We present a case of a treatment resistant schizophrenia patient who shows poor response toward clozapine. Later, he was started with haloperidol. Even though antipsychotic superiority of clozapine in relation to haloperidol is significant, this patient demonstrated otherwise.

Keywords: Treatment Resistant Schizophrenia, Clozapine, Haloperidol

Introduction

Treatment resistance schizophrenia is defined by at least two failed adequate trials with different antipsychotics (at chlorpromazine-equivalent doses of ≥ 600 mg/day for ≥ 6 consecutive weeks) that could be retrospective or preferably include prospective failure to respond to one or more antipsychotic trials [1].

In treatment resistant schizophrenia, clozapine may have a place for the population of schizophrenics that have exhausted all other available psychopharmacologic options. It is a well-tolerated, efficacious antipsychotic, superior to chlorpromazine and haloperidol and causes a low incidence of extrapyramidal side effects [2]. Many will respond satisfactorily to clozapine, but a substantial percentage (perhaps 30%) will have an inadequate response [3].

We presented a case of treatment resistant schizophrenia patient who shows poor response toward clozapine. Later, he was started with haloperidol. Even though antipsychotic superiority of clozapine in relation to haloperidol is significant [4] this patient demonstrated otherwise.

Case Summary

41 years old Malay gentleman who was diagnosed as hebephrenic schizophrenia at the age of 21 years old, had multiple episode of admission to psychiatric ward of about three admissions per year. The reason for admission is mostly due to disorganized behaviour and self-mutilating behaviour (putting objects into his ears and nose). He had multiple history of absconding from the
ward. He also never achieved complete remission upon discharge and follow up. He had tried multiple antipsychotics including clozapine and electro convulsive therapy (ECT) with augmentation of Lithium and Sodium Valproate, but still had poor response. Among antipsychotics that he tried are: stellazine, sulpiride, chlopromazine, risperidone, fluanxol, olanzapine, clopixol, perphenazine and quetiapine up to the maximum dosage. He had two trials of clozapine with ECT but showed no improvement. In addition, he also had multiple admissions to mental institution. Surprisingly, he had history being stable for three years without anti-psychotic (after he defaulted treatment) before current admission. He was able to work at car workshop and function well at home. Upon current admission, he presented again with aggressive behaviour and other relapse symptoms. He was given Tablet Haloperidol up to 10 mg daily and improved drastically with no perceptual and thought disturbance.

Discussion

A different pathophysiology may underlie treatment-resistant schizophrenia as lower presynaptic dopamine capacity was observed in this group. That dopamine synthesis capacity may be a useful biomarker to predict treatment responsiveness [5]. Additionally, the most robust findings indicate that treatment-resistant patients demonstrated glutamatergic abnormalities, a lack of dopaminergic abnormalities, and significant reductions in grey matter compared to treatment-responsive patients [6]. Therefore, it is a need to consider different approaches for treatment resistant schizophrenia.

In treatment resistant schizophrenia, Clozapine provides substantial clinical advantages for patients who experience persistent psychotic symptoms. It is a difficult medication to use, with potentially severe adverse effects and the need for continued monitoring of the white blood cell count [7]. However, in this particular case, the patient showed poor response toward clozapine.

Furthermore, he has a history of poor compliance with medication. Non-compliance with treatment, or with the mandatory white blood cell monitoring, was the most common reason for clozapine cessation, followed by neutropaenia and other adverse effects [8]. Different alternative of anti-psychotic has to be tried in this kind of group. However, the prognosis after cessation of clozapine is still questionable.

There is a study that found that cessation of clozapine in early intervention service patients does not commonly have an adverse effect on clinical status. An obvious share of patients did not deteriorate in the year after stopping clozapine. There may be a distinct population who, despite having initially met the criteria for clozapine therapy, will have more favourable prognosis allowing them to substitute clozapine for an alternative antipsychotic regime [9].

This patient showed good response to haloperidol compared to clozapine despite clozapine was more effective than haloperidol for the treatment of symptoms associated with refractory schizophrenia [10]. In addition, the meta-analysis confirmed that clozapine exhibits superiority over typical antipsychotics both efficacy and safety. However, efficacy data for other second generation antipsychotics in the treatment of patients with refractory schizophrenia were inconclusive [11]. Moreover, evidence from blinded RCTs for
the comparison of clozapine with other SGAs is lacking [12]. Thus, there is still hope in this kind of patient to use other type of anti-psychotic. However, in this patient he demonstrated poor response to SGA.

This case illustrated that prognosis for treatment resistant schizophrenia patients who stop clozapine is variable. Thus new treatment approach has to be done in this kind of group. There is also a need to study other factors that may predict who can safely stop clozapine.

References


**Corresponding Author**
Dr Hijaz bin Hj Ridzwan
Department of Psychiatry
Kulliyyah of Medicine
International Islamic University of Malaysia
Kuantan, Pahang
Malaysia

**Email**: hijazridzwan@iium.edu.my