

CASE REPORT

PALIPERIDONE PALMITATE IN ADOLESCENTS, IS THERE A ROLE?: A CASE REPORT

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Abstract

Objective: Currently, paliperidone palmitate is not approved for the treatment of schizophrenia in adolescents. It is only indicated for treatment of schizophrenia and schizoaffective disorder in adults. This case report highlights the successful treatment outcome with paliperidone palmitate in an adolescent with schizophrenia. **Methods:** We report a case of an adolescent who presented with psychotic symptoms and marked deterioration in functioning over a period of one year. **Results:** She showed significant improvement in functioning, and her psychotic symptoms gradually subsided with paliperidone palmitate. **Conclusions:** Paliperidone palmitate could be considered as an effective treatment modality in adolescents with schizophrenia. *ASEAN Journal of Psychiatry, Vol. 16 (2): July – December 2015: XX XX.*

Keywords: Paliperidone Palmitate, Adolescents, Schizophrenia

Introduction

Paliperidone palmitate is a sustained-release intramuscular (IM) formulation of the well-established atypical antipsychotic agent paliperidone (9-hydroxyrisperidone), the major active metabolite of risperidone [1]. Its mechanism of action is attributed to the antagonism of brain dopamine D2 and serotonin 5-HT_{2A} receptors. It is currently FDA-approved for the treatment of adults with schizophrenia, but not yet for adolescents. To the best of our knowledge, there are no published studies regarding usage of paliperidone palmitate in treating adolescents with schizophrenia. Therefore, this case report illustrates the successful treatment outcome with paliperidone palmitate in an adolescent with schizophrenia.

Case Report

A Chinese adolescent was brought by her grandaunt to the child and adolescent psychiatry clinic for the first time in September 2013 at age fourteen. She presented

with auditory hallucinations and disorganized behaviour for one-year duration. She was also noted to be isolating herself and had interrupted sleep. Her socio-occupational functioning deteriorated whereby she started to neglect activities of daily living and refused to go to school. Occasionally when she became angry, she would kick the furniture at home. There were no other positive symptoms. She had poor appetite and there was a significant loss of weight. No depressive symptoms such as feeling of hopelessness or suicidal thoughts were elicited. There were no symptoms suggestive of mania. There was no history of substance abuse.

Her family reported that patient's mother suffered from postpartum depression and completed suicide one and a half years ago. Since then, patient was noted to have change in behaviour. There was history of seeking treatment with private psychiatrist and she was given oral antipsychotics. However, there was not much improvement. Her birth and developmental history were unremarkable. She had average school performance. Premorbidly,

she is an introvert type of person, has few friends and seldom participates in any extra-curricular activities held in school.

Mental state examination revealed a medium built adolescent with poor personal hygiene. She had poor eye contact and was not forthcoming. She appeared suspicious and did not respond to any questions. Her affect was restricted and she smiled inappropriately in between the interview. She had poor insight towards her illness. Physical examinations were unremarkable. The patient was diagnosed with schizophrenia based on DSM V. She scored 21-30 in Personal and Social Performance (PSP) scale. She was initially started on oral antipsychotics; risperidone 1mg on night and the dosage was gradually optimised up to risperidone 4mg over a period of one year. However, there was not much improvement in symptoms and functioning. Her family members reported that her personal hygiene was poor; she isolated herself and would roam around the house in soiled undergarments. Patient also refused to come for follow-up visits to the clinic. We arranged for a home visit in liaison with the community psychiatry unit to assess her clinically and to suggest for depot. Family members agreed for depot. She was subsequently started on paliperidone depot (paliperidone palmitate) 100mg stat dose, followed by 100mg on Day 8; 100mg on Day 28 and 150mg monthly for maximum response. Within a time frame of two months since the commencement of paliperidone palmitate, there was noticeable improvement in terms of symptoms and functioning. Her personal hygiene improved wherein she now takes baths, changes her clothes and takes care of her hygiene during menses. She started going out with family members and initiates short conversations with them. There were no psychotic symptoms or abnormal behaviour reported. No side effects such as extrapyramidal symptoms or insomnia were noted with the depot. She had some amount of weight gain about 2 kilograms since commencing depot. Her oral risperidone was still continued at 3mg daily and planned for gradual tapering down. She scored 51-60 in PSP scale. Plans were begun for the patient to come to the clinic for follow-up as well as for rehabilitation. She finally came to the clinic recently for follow up after being persuaded by her family members.

Discussion

The ultimate goal for clinicians is ameliorating symptoms and improving the quality of life for patients with schizophrenia. Treatment choice is primarily guided by tolerability and safety considerations because adolescents appear to be at a higher risk than adults for developing extrapyramidal symptoms as well as metabolic and endocrine abnormalities [2]. Long-acting injectables offer a prolonged therapeutic advantage over oral antipsychotics by enhancing patient adherence to treatment, thereby mitigating the risk of relapse, hospitalization, and suicide secondary to treatment non adherence [3, 4]. This case highlights the improvement in personal and social functioning in adolescent upon commencement of paliperidone depot.

Paliperidone palmitate is currently used in the treatment of schizoaffective disorder [5] in addition to its previous indication for the acute and maintenance treatment of schizophrenia in adults. The recommended maintenance dose for treatment of schizophrenia in adults is 117mg [5]. Various studies have shown the effectiveness of paliperidone depot for treatment of adults with schizophrenia. However, it has not been evaluated in adolescents. A study by Padina et al stated that paliperidone palmitate was efficacious and generally tolerated in adult patients with acutely exacerbated schizophrenia [6]. Another 13-week open-label study by Li et al also had similar findings whereby paliperidone depot was found to be efficacious and safe for use specifically in Chinese patients with acute schizophrenia [7]. Gopal et al reported that paliperidone depot effectively reduced symptoms of schizophrenia, improved patient functioning and significantly reduced time frame to relapse of illness [8].

In this case, the adolescent presented with long duration of untreated illness and deterioration of personal and socio-occupational functioning which significantly improved upon switching to paliperidone depot from oral antipsychotic (risperidone). She also gained some weight since initiation of treatment and there were no reported adverse side effects. Therefore, in this report, we demonstrate the successful use of paliperidone palmitate for the treatment of schizophrenia in adolescents. However, further

clinical trials are required to substantiate this report.

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Received: 19 December 2014

Accepted: 22 May 2015