
SYSTEMATIC REVIEW OF THE EFFICACY AND TOLERABILITY OF CLOZAPINE IN THE TREATMENT OF YOUTH WITH EARLY ONSET SCHIZOPHRENIA

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Background: The use of clozapine (CLZ) for treatment-resistant schizophrenia is well established in adults. However, it is seldom used in children and adolescents with early onset schizophrenia (EOS) largely because of lack of clarity about its risk benefit ratio. This review synthesises and evaluates available evidence regarding the efficacy and tolerability of CLZ in EOS with the aim to assist clinical decision-making.

Methods: We conducted a systematic review of the primary the literature on the clinical efficacy and adverse drug reactions (ADRs) observed during CLZ treatment in EOS. We also identified relevant practice guidelines and summarised current guidance.

Results: CLZ showed superior efficacy than other antipsychotics in treating refractory EOS patients; short-term clinical trials suggest an average improvement of 69% on the Brief Psychiatric Rating Scale that was sustained during long-term follow-up. No fatalities linked to CLZ treatment were reported. Sedation and hypersalivation were the most common complaints (90% of patients). Other common ADRs (10-60% of patients) were enuresis, constipation, weight gain, and non-specific EEG changes. Neutropenia was reported in 6-15% while agranulocytosis was rare. Seizures were also uncommon. Metabolic changes were relatively common (8-22%). Overall the rate of discontinuation was low (3-6%). Current guidelines recommend the use of CLZ in treatment-resistant EOS patients and provide detailed schedule of assessments to evaluate and assess potential ADRs both prior to initiation and throughout CLZ treatment.

Conclusion: Available data is consistent in demonstrating that CLZ is effective and generally safe in the treatment of refractory EOS provided patients are regularly monitored.