Olanzapine-induced pancytopenia: a rare but worrying complication

ABSTRACT

Unlike clozapine, and despite its structural similarities, olanzapine is not usually associated with haematological suppression. Nonetheless this case report highlights an incident of olanzapine-induced thrombocytopenia and neutropenia in a first-contact patient. We report on a 50-year-old male who presented with 7 years of delusions and hallucinations. A diagnosis of schizophrenia was made in the absence of any suggestive features of mood disorders, substance abuse or organicity, and olanzapine as second-line treatment. Within a week of starting treatment he developed biochemical neutropenia and thrombocytopenia without any clinical symptoms that resolved after cessation of the offending drug. An organic workup for infective, inflammatory, and neoplastic causes was unremarkable. Comparison with other case reports and 3 postulated mechanisms are discussed. Despite its comparative rarity, the addition of this case report to a growing corpus suggests that clinicians should maintain heightened surveillance of patients prescribed olanzapine, to identify any untoward iatrogenic haematological abnormalities or immunosuppression.

Keyword: Antipsychotic agents; Neutropenia; Schizophrenia; Thrombocytopenia