The Role of Clozapine and Lithium Combination Therapy in an Adolescent with Treatment-Resistant Schizoaffective Disorder - A Case Report

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INTRODUCTION

- An adolescent female, whose symptoms began at age 13 in 2019, was diagnosed with treatment-resistant schizoaffective disorder after presenting with auditory hallucinations, disorganized behaviour, and mood instability.
- She has had three prior psychiatric admissions, two PICU and one GAU, where she has remained for nearly three years due to treatment resistance and fluctuating presentation, before transferring current GAU.
- Despite multiple antipsychotic trials, symptom control remained limited. Previous clozapine treatment led to marked improvement but was discontinued following neutropenia, resulting in relapse.
- Upon her current admission, she was re-started on lithium, titrated to 800 mg nocte, and haloperidol was introduced and titrated to 5 mg OD. Owing to poor response and non-compliance with ECG monitoring, haloperidol was stopped, with plans to titrate lithium to maximal dose and reintroduce clozapine gradually.

DISCUSSION

- This case illustrates the complexity of managing treatment-resistant schizoaffective disorder in adolescence, particularly when clozapine the most effective agent is limited by haematological side-effects.
- Lithium augmentation was used to improve affective regulation and mitigate risk of neutropenia. Despite partial stabilization on lithium and olanzapine, residual psychotic symptoms persisted, reflecting underlying neurodevelopmental factors and compliance challenges.
- The combination of thorough medical monitoring, family engagement, and cautious pharmacological titration was critical in minimizing relapse and improving overall functioning.

METHODS

- A multidisciplinary treatment strategy combining pharmacological and psychosocial approaches was implemented.
- Pharmacological management involved multiple antipsychotic trials (risperidone, aripiprazole, olanzapine, amisulpride, and zuclopenthixol depot), mood stabilizers (lithium and lamotrigine), and antidepressant augmentation (mirtazapine).
- Lithium augmentation was selected to enhance mood stability and to support neutrophil recovery in preparation for potential clozapine rechallenge.
- Comprehensive investigations included MRI brain scanning, genetic testing (no abnormalities detected), autoimmune screening, all of which returned unremarkable findings. Pharmacogenetic profiling indicated likely responsiveness to olanzapine, asenapine, and lamotrigine.
- Neurodevelopmental history revealed significant social communication difficulties and rigid behavioural patterns, suggesting the patient may be on the autism spectrum, although a formal diagnosis could not be confirmed due to limited capacity to tolerate ADOS assessment.
- Psychosocial interventions emphasized behaviouralregulation, family collaboration, and the use of graded Section 17 leave to promote community reintegration.

CONCLUSION

- Clozapine with lithium augmentation is the most effective treatment for adolescent treatment-resistant schizoaffective disorder, requiring a multidisciplinary approach with close haematological monitoring and developmental sensitivity to ensure long-term stability and recovery.

References

- Moldavsky M., Matzner Y., Weizman A. “Combined clozapine-lithium treatment for schizophrenia and schizoaffective disorder.” European Psychiatry. 1998;13(2):104-106.
- Case notes from patient’s documentations.
- Risks and benefits of clozapine and lithium co-prescribing: A systematic review and expert recommendations, Hélène Verdoux , Clélia Quiles, Jose de Leon