

to olanzapine and citalopram. “Controlled falls” were observed, during which AM placed herself suddenly onto the floor. In February 2022, she was witnessed having a self-terminating generalised tonic clonic seizure (GTCS) lasting 3 minutes and later witnessed having three more seizures. Computed tomography excluded acute intracranial pathology. She had no previous history of seizures. An electroencephalogram displayed focal slowing over the frontal region greater on the right and presence of sharp, transient, sharpened slow wave, triphasic waves and reported that epileptiform discharges can be seen in AD in the absence of epilepsy.

Behavioural charts, Cohen Mansfield Agitation Inventory (CMAI) and Neuropsychiatric inventory (NPI) questionnaires were used to monitor response. Decision was made to trial Nabilone in April 2022 due to minimal improvement. Nabilone was started at 0.25 mg daily and up-titrated by 0.25 mg fortnightly based on the response. Over the subsequent month there was a measurable improvement. This was temporarily halted due to issues with nabilone supply, together with cessation of lorazepam, showing worsening in behaviours. Nabilone was eventually restarted and increased to 1 mg once daily with promising effect. **Results.** There was a notable qualitative improvement in AM’s engagement and communication with family and staff. Prior to treatment the frequency of aggressive incidents ranged from 25–35, reducing to five to ten incidents per day. Controlled falls largely ceased. The NPI Caregiver distress score dropped from 21 to 8 over three months; Frequency and severity scores dropped from 73 to 40 during the same period. CMAI scores dropped from 86 to 64 over two months.

Conclusion. We describe a measurable improvement in BPSDs and quality of life in a patient with severe AD. Reduction in irritability, agitation and improvements in sleep were observed after initiating nabilone. The mechanism of nabilone via CB1 agonism has shown to be neuroprotective and anti-inflammatory. This indicates a promising treatment for BPSDs.

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Transcending Erotomania: A Case of Long-Term Multi-Comorbid Management in an Adolescent Medium Secure Unit

Dr Manzar Shahid*, Dr Parag Shah
and Dr Muhammad Saqib Siddique

Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust,
Newcastle upon Tyne, United Kingdom

*Presenting author.

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Aims. 20 year old patient open to mental health services since the age of 8. Through the years, they have had work-up and diagnoses of ADHD, ASD, Schizoaffective Disorder (with prominent erotomanic delusions) and sexual identity concerns.

They spent a number of years in psychiatric in-patient units following an index offence. Initially in an adolescent LSU and subsequently in an adolescent MSU.

After 5 years of their stay at the MSU, their transition to an adult rehabilitation ward was planned and completed.

Methods. 20 year old, oldest of 5 siblings, born with no complications during or after pregnancy and at full-term. First referred to mental health services aged 6 regarding difficulties at school leading to a diagnosis of ADHD.

At age 13, re-engaged with mental health services following concerns around self-harm, disappearing from home, alcohol use. Also with difficulties around gender identity and sexual orientation. Shortly after, elements of ASD were identified, including social and communication difficulties and special interests which included single females.

Around age 16, patient developed erotomanic delusions. First towards a female friend in dance class – patient wanted to run away with them and have their babies, and carried a knife to hurt anyone who tried to get in their way, eventually leading to the index offence. In addition, there were similar erotomanic delusions with regards to at least 2 famous female music personalities.

With a significant mood component accompanying the psychosis, she was diagnosed and managed as having Schizoaffective Disorder.

Results. The patient presented with a complex, multimodal presentation which took time and a comprehensive holistic approach. They were trialled on 3 different antipsychotics and eventually clozapine which needed stopping due to side effects. Best response was eventually observed with a return to olanzapine.

Patient also had 19 treatments of ECT (13 being high dose) with marked transient improvement.

Psychology, OT and the MDT largely focussed on building therapeutic relationships with the patient which gradually helped the patient develop insight around their erotomanic delusions and the impact on their life.

Conclusion. Despite the complexities of this case, it highlighted that a robust, consistent, holistic approach can change lives even though this may take some time. The patient was utilizing leaves off the ward, taking part in the education sessions and activities on the ward and has recently been transferred to an adult rehabilitation ward after years in an adolescent specialist in-patient service.

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Navigating the Balance: Treatment-Resistant Schizophrenia Relapse Risks Versus Clozapine-Related Cardiovascular Complications - a Case Report

Dr Hardeep Singh* and Dr Alexandra Blackman

Surrey and Borders NHS Foundation Trust, Surrey, United Kingdom

*Presenting author.

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Aims. Clozapine, known for its efficacy in treating treatment-resistant schizophrenia, offers significant benefits. However, its use also carries potential cardiovascular side effects, such as myocarditis early in treatment and cardiomyopathy with prolonged use. This case highlights the challenge of balancing the risks of treatment-resistant schizophrenia relapse against the potential cardiovascular complications associated with clozapine therapy.

Methods. An adult male with treatment-resistant schizophrenia was initially prescribed clozapine but switched to paliperidone depot due to compliance issues. However, he relapsed shortly after and had to be restarted on clozapine, albeit at a lower dose due to associated tachycardia, supplemented with risperidone. After two years on clozapine, he was diagnosed with cardiomyopathy, prompting a cardiology review. Clozapine was withheld, and risperidone dosage was increased, but he experienced a severe relapse. Despite the risks, multiple

multidisciplinary meetings and approval from the medication optimization committee led to his re-commencement on clozapine due to the treatment-resistant nature of his illness and associated risks.

Results. Clozapine, a benzisoxazole derivative, is used for treatment-resistant schizophrenia and aggressive behaviours. Its pharmacological action involves D2 and 5HT2A receptor antagonism, affecting serotonergic, dopaminergic, adrenergic, cholinergic, and histaminergic receptors. However, severe side effects like agranulocytosis, seizures, myocarditis, tachycardia, and cardiomyopathy can occur. Cardiomyopathy incidence is rare (0.02–0.1%) with a mortality rate of 17.9%. Proposed mechanisms include undetected myocarditis and persistent tachycardia-induced changes leading to ventricular dysfunction. Common findings in investigations include raised CRP, leucocytosis, eosinophilia, increased lactate, elevated troponin, non-specific ECG changes, and ventricular dysfunction on echocardiography.

Conclusion. Clozapine poses rare but potentially fatal cardiac risks, including myocarditis and cardiomyopathy. Essential baseline investigations and close monitoring during the initial weeks are crucial. Persistent tachycardia may signal trouble. If suspected, serial monitoring of FBC, troponin, and CRP levels is recommended, with prompt management if confirmed with discontinuation of clozapine, as the cardiomyopathy is often reversible. A multidisciplinary approach involving cardiology is vital for optimal management. This is particularly crucial when weighing the risks of relapse in schizophrenia against the potential cardiovascular complications of clozapine therapy.

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A Rare Case of rTMS Induced Schizophrenia Symptom Switch

Dr Aayushi Sobhani*, Dr Sachin Pursnani, Dr Anureet kaur Chandi, Dr Akansha Bhardwaj and Professor Nand Kumar

All India Institute of Medical Sciences, New Delhi, India

*Presenting author.

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Aims.

- This case study investigates a rare occurrence of symptom transition in a chronic schizophrenia patient following high-frequency repetitive transcranial magnetic stimulation (rTMS), aiming to understand the unexpected shift from predominantly negative to positive symptoms.
- rTMS, known for inducing changes in neuronal activity based on Faraday's law, is believed to enhance cortical excitability through high-frequency stimulation.
- Schizophrenia, a severe and chronic mental disorder, presents with both positive (e.g., delusions, hallucinations) and negative symptoms (e.g., apathy). Current treatments, predominantly antipsychotic drugs, often show limited efficacy, especially for negative symptoms. Non-invasive neuromodulation techniques like rTMS are emerging as potential interventions.

Methods. This case involves a 27-year-old banking executive with a 30 months illness duration primarily marked by negative symptoms over the past 3 months. Despite various antipsychotics, there was no improvement, leading to the initiation of high-frequency rTMS on the left dorsolateral prefrontal cortex (DLPFC) as an adjunct strategy for persistent negative symptoms. Surprisingly,

after the 5th rTMS session, positive symptoms like delusions and hallucinations emerged. Serial assessments demonstrated a decrease in negative symptom domain scores on PANSS but an increase in positive symptom domain scores on PANSS.

Results.

- Results suggest that 5 Hz rTMS over the left DLPFC may have contributed to the transition to positive symptoms. The discussion explores limited literature on rTMS-induced positive symptoms, with case reports dating back to 2004 indicating the possibility of such induction. Studies propose a link between higher pulse frequency, motor threshold intensity, left prefrontal cortex stimulation, and longer trial durations with the exacerbation of positive symptoms, possibly linked to dopamine changes in specific brain tracts.
- Recent trials indicate potential improvement in positive symptoms, such as excitement, with low frequency rTMS of the temporo parietal area. However, the efficacy of rTMS varies with the stimulation site, with left prefrontal rTMS showing promise for negative symptoms and left temporo-parietal junction stimulation possibly reducing auditory hallucinations.

Conclusion. This case report suggests that a subset of schizophrenia patients may experience a transient exacerbation of positive symptoms following rTMS. This underscores the need for increased awareness of potential side effects, serving as an exploratory study that calls for future research to refine these findings for a clearer understanding of rTMS-induced symptom switches in schizophrenia.

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Challenges and Delay in Treatment With Clozapine Due to Thrombocytopenia: A Case Study

Dr Suresh Thapaliya*, Ms Glenda Boutell and Dr Mudasir Firdosi Kent and Medway NHS and Social Care Partnership Trust, Kent, United Kingdom

*Presenting author.

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Aims. Clozapine is the most effective antipsychotic medication for patients with treatment-resistant psychotic disorders. Its discontinuation can precipitate relapse that can be often challenging to treat.

Methods. This is a case study of a female patient in her early 40s who is known to the mental health services with a diagnosis of schizoaffective disorder. She was admitted to acute psychiatric inpatient unit due to relapse characterised by psychotic, catatonic features and poor physical health condition due to refusal to eat and drink. She was stable on clozapine for more than a decade and had become unwell after discontinuation of clozapine in the community due to platelet count below $50 \times 10^9/L$ with normal other parameters. Low platelet count was detected during routine monthly blood monitoring after a few years of commencing clozapine.

Whilst an inpatient, there were several trials of re-titration of clozapine which had to be withheld because of ambiguity regarding the cause of persistent thrombocytopenia. Other treatment options including alternative antipsychotics and 12 sessions of ECT were tried without any success. Haematologist opinion was sought at early stage of admission and blood investigations were done but there was delay in bone marrow biopsy due to practical issues.