

CASE REPORT

Lithium therapy in comorbid temporal lobe epilepsy and cycloid psychosis

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Abstract

The treatment of post-ictal psychosis has foundered on uncertainty in diagnosis of psychotic phenotypes, and equivocal efficacy of first and second generation antipsychotics. This article presents a case history of comorbid temporal lobe epilepsy and psychosis, suggests the applicability of the continental, cycloid psychosis diagnostic conceptualization to post-ictal psychoses, and demonstrates the efficacy of lithium in their treatment. Clinical studies of comorbidity of epilepsy and psychosis offer great potential as a basis for modelling brain–mind relationships, and neuropsychiatric nosology, pathophysiology and treatment.

INTRODUCTION

A 45-year-old woman, PG, previously diagnosed with comorbid schizophrenia and temporal lobe epilepsy (TLE), and managed with a combination of anti-epileptic and second generation antipsychotic agents, was re-diagnosed with post-ictal, cycloid psychosis, anxiety-happiness type, and successfully treated with lithium therapy. The comorbidity of epilepsy and psychosis is well described. However, comorbidities with specifically cycloid psychoses and their medical management have yet to be described.

CASE REPORT

PG recalled religious experiences, probably auras, from her pre-teens. TLE overtaken in her early 20s, following childbirth. Seizures manifested in déjà vu, lip-smacking, tonic-clonic fits and amnesia. Post-seizure PG was confused and irritable. Right-sided TLE was confirmed by EEG, and changes on PET scan and MRI. PG did not tolerate valproate, or carbamazepine. She was

stabilized on topiramate, but, on account of sedation, only took sub-therapeutic doses. Schizophrenia was diagnosed just after TLE. The most prominent symptoms were grandiose and religious delusions. Between 2010 and 2016 she had an average of three psychiatric admissions per annum. Treatment with second generation antipsychotics, especially depot preparations, made her feel unwell, and she averred induced seizures.

PG suffered several fits prior to the most recent admission. Her mental state alternated rapidly between excitement that bordered on ecstasy, with religious delusions, and anxiety, with irritability and low-grade paranoia. PG was thought disordered. She said '2016 is the end of the world I keep having attacks of God ... God loves me ... I was meant to rewrite the bible.' She could be observed on the ward, praying to herself.

The patient received her last depot injection 2 weeks previously. PG was placed on oral olanzapine and clonazepam, without benefit. On Andreasen's Scale for Assessment of Thought, Language, and Communication, PG's global score was 4/5. Incoherence and illogicality were to the fore. ECT was offered, but after one treatment, it was declined. She had had an adequate

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Table 1: Cycloid psychosis: Leonhard classification

Psychic function	Cycloid psychosis	Unsystematic schizophrenia
Emotion	Anxiety-happiness psychosis	Affective paraphrenia
Thought	Confusional psychosis	Cataphasia
Psycho-motility	Motor psychosis: hyperkinetic/akinetic	Periodic catatonia

Table 2: Perris criteria for cycloid psychosis: A to D are necessary.

- A. onset of psychosis from within hours up to a few days.
- B. At least four of the following symptoms
 - i Confusion with perplexity
 - ii Mood incongruent, mostly persecutory delusions
 - iii Overwhelming generalized anxiety
 - iv hallucinosis, often with death themes
 - v ecstasy with religious content
 - vi akinetic or hyperkinetic motility disturbances
 - vii preoccupation with death
 - viii subclinical mood swings
- C. Age of onset 15–50 years
- D. Unrelated substance abuse or brain injury

seizure, but complained that it ‘made my muscles sore I felt like I was going to die ... it felt like death therapy.’

PG became violent and required seclusion. Lithium was introduced, and at 1g per day, her thought disorder rapidly remitted. Global rating was closer to three than to two. At week three, her global rating was two, and she was discharged to the community team.

At 2 months, PG was free from active psychosis. Her syntax and semantics fell short of 100%: the former closer to 10, at 8 or 9/10; the latter, at 7–8/10. She explained that she knew she suffered from psychosis, but even when psychotic, the religious themes were an intensification of her everyday appeal to God. She had taken no medication since discharge, and was against re-taking lithium. It was too sedating. She agreed to rethink topiramate, both as an anti-epileptic and as a stabilizer of her mental state.

DISCUSSION

Leonhard [1] introduced the diagnosis, cycloid psychosis (Table 1). His system encompasses a spectrum of psychoses in three domains (ABC): affect (A) as anxiety-happiness psychosis; behaviour (B), as motor psychosis; and, cognition (C), as confusional psychosis. Perris [2, 3] proposed a unitary syndrome with operational diagnostic criteria (Table 2).

Cycloid psychoses are excluded as a named category from the ICD and the DSM. Acute and transient psychotic disorders (ATPD) was introduced in ICD-10 to accommodate comparable, non-manic psychoses with acute onset and brief duration [4]. ATPD share several characteristics with cycloid conditions, including more benign course, greater prevalence in women, occurring more in developing countries, and high prevalence of premorbid psychological and physiologic stressors.

Cycloid psychoses run a relapsing-remitting course [5], which is biphasic either within, or between episodes. The latter are relatively time-limited, but in the absence of effective treatment, the condition tends to chronicity. In terms of aetiology, problems during pregnancy and birth are more likely to have occurred in mothers of subjects. There is a very low classical-genetic, as opposed to epigenetic, hereditary burden. The most noted precipitating and maintaining factors are environmental stress, illicit drugs (especially cannabis), and in women,

abnormal hormonal status. A relationship between epilepsy and cycloid psychosis has not, as yet, been noted.

Controlled treatment studies of cycloid psychoses have yet to be performed. Electroconvulsive therapy is often cited in preference to first generation antipsychotics. Brockington and Perris recommended rapid neuroleptisation followed by the addition of lithium, ‘if required’ [6]. Second generation antipsychotic preparations, alongside high doses of benzodiazepines, were recently advocated [7].

Foucher (op. cit. [5]) recently gave a detailed description of the cycloid form, anxiety happiness psychosis. The condition is polymorphous, often fluctuating, by the hour, between excitation and inhibition, fear of death and spiritual exultation, anxious stupor and elation. There can be both hallucinations and pseudo-hallucinations. Ideas of grandeur commonly have a religious quality. Subjects are altruistic rather than narcissistic. They feel called to a Divine mission, and do not attach importance to themselves. Indeed the patient is a messenger. Prior to the neuroleptic era, remission, with insight, generally occurred within half a year. Recurrence of episodes was the rule with an average of one episode every 2–3 years. Subjects are prone to post-psychotic depression.

The spectrum of evidence-based, therapeutic application of lithium in neurology and psychiatry is widening. There is early evidence for lithium lowering seizure thresholds, and therefore being recommended as an anti-epileptic, adjuvant [8].

Perris conducted the definitive study of lithium and cycloid psychosis in a cohort of 30 patients [9]. The mean number of morbid episodes and the mean total morbidity were found to be significantly reduced.

PG suffered TLE and comorbid cycloid psychosis from early adulthood. Antipsychotics, can lower the seizure threshold [10], increasing fit frequency, 1 and thereby exacerbate epileptic psychosis. Hence caution must be exerted in their use, which is usually essential. The introduction of lithium effected a dramatic elimination of thought disorder, and partial insight into her delusional condition. It appears that lithium was effective in PG, partly by eliminating the affective and psychotic components of her comorbid TLE and cycloid psychosis, and partly by raising the seizure thresholds.

CONFLICT OF INTEREST STATEMENT

None declared.

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ETHICAL APPROVAL

Obtained.

CONSENT

Obtained.

GUARANTOR

Dr P. Brown.

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