the pandemic[3,4] and is clinically and cost effective, providing increased access to evidence-based care.[5] Consequently, encouraging telehealth sessions with therapists in areas with greater capacity to see new patients may broaden access to psychological treatment. Furthermore, increased use of novel digital interventions,[5] supported by telepsychiatry, may partially mitigate the access block. For example, This Way Up, provides internet-delivered cognitive behavioural therapy (iCBT) programmes (self-guided or clinician-guided) for a wide range of mental health disorders. Psychiatrists can 'prescribe' a free course and receive access to their patients' course content and outcome measures to review in follow-up sessions.

Accordingly, we recommend:

1. Psychiatrists highlight the value of telehealth and digital mental health resources with suitable patients, including its acceptability, convenience and proven effectiveness.
2. Patients can be directed to searchable databases for psychologists, social workers and occupational therapists. They include new telehealth options to connect with a clinician anywhere in Australia.
3. While supporting patients waiting for a therapist, psychiatrists can guide the use of digital mental health resources found at the Australian Government portal: Head to Health. It includes links to technology-enabled therapies, including internet-based programmes, mobile applications, forums and informational websites.

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A curious case of COVID-19: A novel cause of psychosis

Dear Sir,

We present the first known documented case of COVID-19-related new onset psychosis in Australia. Nationally, with 162,016 cases of COVID-19, our hospital in Western Sydney has seen an explosion of cases occupying up to 34% of all medical beds.[1]

A non-English-speaking woman in her 60s presented with an acute, new onset psychotic disorder 4 days after diagnosis of COVID-19. Intriguingly, despite significant comorbidities including hyperthyroidism, heart failure, pulmonary hypertension and atrial fibrillation, she had no respiratory symptoms, headache or pyrexia. Symptoms included severe agitation with chanting and dancing, perceptual disturbances and posturing. Fascinatingly, she also had no previous psychiatric history. Due to severe behavioural disturbance, she was admitted to intensive care unit and intubated for investigations. Importantly, she was not commenced on steroid treatment. Investigations revealed minor reduction in white cell count, elevated C-reactive protein and decreased thyroid-stimulating hormone with normal free thyroxine and normal cerebrospinal fluid. CT brain showed a small hypodense region in the right parietal lobe.

After transfer to COVID-19 medical ward, consultation liaison psychiatry assessment via telepsychiatry and phone interpreter revealed fluctuating mental state with catatonic features including excitability, posturing and echopraxia. Our differentials included COVID-19-induced delirium, encephalitis, mania or psychosis. She was treated with regular quetiapine 50 mg twice daily under duty of care.

Neurology ascertained that COVID-19 encephalitis was unlikely due to lack of focal neurological signs. Given persistence of neuropsychiatric symptoms with difficult behaviour on a busy medical ward, she was transferred under the mental health act to psychiatric emergency care centre under the joint governance of psychiatry and infectious diseases.

Further history revealed her daughter had bipolar affective disorder (BPAD), all family members contracted COVID-19, and the patient was unable to return home overseas due to restrictions. Her mental state improved significantly on quetiapine 100 mg twice daily as the delirium resolved. She was discharged after 12 days.

Cases of COVID-19-related new onset psychosis in the absence of respiratory symptoms and steroid treatment are rare.[2] It is likely that the emergence of this new onset psychosis was multifactorial, brought on by fear, distress and social

isolation compounded by cultural and linguistic barriers in a patient genetically susceptible to BPAD and exhibiting multiple comorbidities including vulnerable brain. Furthermore, where to admit and manage such complex patients is challenging and depends on local resources and legal frameworks.

As Australia opens its borders, we are likely to encounter COVID-19 cases manifesting as curious neuropsychiatric symptoms. Clinicians should be aware that although rare, psychosis can manifest as the only symptom of COVID-19. Future research may help us to determine if other treatments in addition to antipsychotics, including antivirals, anti-inflammatory drugs and immunomodulatory drugs, could be useful in the management of such patients.

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Lamotrigine in haemodialysis – A case report

Dear Sir,

A 71-year-old woman with a history of bipolar I affective disorder developed worsening chronic kidney disease, necessitating cessation of long-term lithium treatment and she required haemodialysis for end-stage renal failure. Written informed consent was obtained to publish the case.

The patient's mental illness was in remission and she had been stable in her mental state on lamotrigine 75mg nocte, quetiapine XR 200mg nocte and olanzapine 5mg nocte for the past year. Lamotrigine had been added during a previous hospital admission when she was receiving electroconvulsive treatment for depression, which precluded the use of alternative mood stabilisers. While quetiapine was effective, olanzapine had been added during the same admission predominantly for its sedative effect.

On day 1 of dialysis, her pre-dialysis baseline lamotrigine serum trough level was 2.5mg/L. Regular lamotrigine was continued. On day 5, after three sessions of haemodialysis, her post-dialysis lamotrigine serum level had dropped to 1.6mg/L, a 36% reduction from baseline.

Within five days, she presented with deterioration in her mental state with emergent mania. She described acute onset rapid thoughts, disorganisation and insomnia. She also displayed grandiosities and incongruent affect, suggestive of relapse. She required involuntary psychiatric admission and remained in hospital for a period of 5 days for stabilisation of her mental state. Haemodialysis was withheld during this period.

It was highly likely that her deterioration was secondary to the drop in lamotrigine blood levels. Neither olanzapine nor quetiapine is dialysable.[1,2] While lamotrigine appears generally to have limited benefit in the prevention of manic episodes, and lamotrigine levels do not clearly correlate with clinical status in those with bipolar disorder, mood instability may follow rapid changes in lamotrigine blood levels.

Although the patient's lamotrigine dose remained unchanged, her olanzapine dose was increased to 10mg nocte which led to improvement in her mental state and resolution of her manic symptoms.

Lamotrigine is poorly soluble in water, is approximately 50% bound to plasma proteins and has a modest volume of distribution. In a study of six subjects on haemodialysis, an average of 20% (range, 5.6%–35.1%) of lamotrigine present in the body was eliminated during a 4-h haemodialysis session.[3]

In patients on lamotrigine treatment for bipolar disorder undergoing haemodialysis, lamotrigine dose may need to be up-titrated due to the associated haemodialysis extraction factor. Monitoring of the therapeutic drug levels pre- and post-dialysis is recommended to assist with dose titration.

Disclosure

The author reports no conflict of interest. The author alone is responsible for the content and writing of the paper.

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