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Chloroquine-Induced First-Episode Psychosis in a Patient Self-medicated for COVID-19

To the Editor:

Hydroxychloroquine is one of the most promising therapies tested in patients with COVID-19, despite worldwide controversies (1–3), leading to an increase in its use, including frequent self-medications. Some studies examined the safety of hydroxychloroquine in the treatment of COVID-19 (2), but none reported potential psychiatric side effects. Here, we report the case of a first-episode psychosis in a patient self-medicated with chloroquine (CQ) for COVID-19.

A 57-year-old woman was accompanied by firefighters to the emergency room at Bichat Hospital in Paris, France, for a major psychomotor agitation. This patient had never been hospitalized in psychiatry, nor had she had similar episodes. Her general practitioner had been prescribing escitalopram 10 mg/day for several years for subsyndromal anxiety. She had no other personal or family medical history. Her son lives with her and developed symptoms evocating a COVID-19 infection 3 weeks earlier. Afraid of getting COVID-19, the patient self-medicated with CQ for 7 days to prevent it. After 2 days, the patient presented with agitation and aggressiveness. The morning of the seventh day, she left the house shouting and slamming the door and was found a few hours later in the street in a state of major psychomotor agitation.

On her arrival at the emergency room, the patient still suffered from agitation, with mystical delusion and visual hallucinations, associated with severe anxiety. Sedation with loxapine 100 mg and clonazepam 1 mg was administered with a mechanical contention. Complementary examinations, brain scan, and standard blood exams were normal. We estimated the probability of psychiatric adverse drug reactions with the Naranjo algorithm, which confirmed CQ imputability as “probable” (total score = 7; previous conclusive reports on this reaction [+1], psychotic symptoms appeared after CQ was introduced [+2], symptoms disappeared after CQ was discontinued [+1], no alternative cause of the symptoms [+2], symptoms were confirmed by standardized examination [+1]). The patient was hospitalized in a psychiatric department.

In this first report of CQ-induced first-episode psychosis in a patient self-medicated for COVID-19, we offer a reminder that

psychosis and mood disorders are among the most frequent psychiatric adverse effects of CQ (4). Moreover, CQ is metabolized by CYP2D6 (cytochrome P450 2D6), and the CQ toxicity may have been enhanced here by escitalopram, which is a CYP2D6 inhibitor (5).

In conclusion, CQ may induce de novo psychotic symptoms. This report highlights the risks of self-medication with CQ and the need for close monitoring of psychiatric symptoms. Particular attention might be required with co-prescriptions of CYP2D6 inhibitors.

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Article Information

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