A Case of Chloroquine-Induced Recurrent Mania

To the Editor: Drugs with a definite propensity to cause manic symptoms include levodopa, corticosteroids, and anabolic-androgenic steroids. Antidepressants of the tricyclic and monoamine oxidase inhibitor classes can induce mania in patients with preexisting bipolar affective disorder.[1] Drugs that are probably capable of inducing mania, but for which the evidence is less scientifically secure, include other dopaminergic antiparkinsonian drugs, thyroxine, iproniazid and isoniazid, sympathomimetic drugs, baclofen, corticosteroids, 5-dehydroepiandrosterone, alprazolam, ciprofloxacin, captopril, amphetamine, angiotensin convertase enzyme inhibitors, phencyclidine, and antimalarial drugs (eg, primaquine, chloroquine, mefloquine, artesunate, artemether).[1–4] Initially, neuropsychiatric manifestations associated with malaria and complications of antimalarial drugs, especially chloroquine, received little attention.[3,4–7] Cases of chloroquine-induced psychiatric complications, including mania, have been previously described,[4–7] but we are reporting the first case of chloroquine-induced recurrent mania.

Case report. Mr A, a 26-year-old man who had moved to Delhi from the neighboring area, was admitted to the medicine department with complaints of high-grade fever with chills and rigors, headache, body ache, anorexia, dizziness, and nausea. There was no history of neck rigidity, photophobia, seizure, or concealed or overt bleeding. Physical examination revealed no neurologic deficit. The patient's blood pressure was in the range of 110–120/70–80 mm Hg. Pulse rate was 110–120 bpm, and the urine output was within normal limits. Blood electrolyte levels, blood sugar level, lipid profile, and renal function tests were within normal ranges. Liver function tests also revealed no abnormalities, and neither did computed tomography scan of the head.

The investigations confirmed malaria and ruled out enteric fever, dengue, or intracranial lesions. Mr A was started on a course of chloroquine. On the third day, the fever and other associated symptoms subsided, but he developed overactivity, excessive talking, argumentativeness, extreme irritability, grandiosity, abusiveness, and decreased need for sleep. There were no illusions, hallucinations, or first-rank symptoms suggestive of schizophrenia. His personal and family history was noncontributory. In the past (3 years prior), there was also history of developing manic-like symptoms on treatment with chloroquine given for high-grade fever by a private physician. He was given the antipsychotic drug haloperidol 20 mg/d, and the manic symptoms remitted within 2 weeks. He continued that treatment for 3 months and then stopped on his own.

There were no psychiatric symptoms before this episode, and mental status examination had revealed increased psychomotor activity, pressure of speech, irritable mood, delusion of grandiosity, impaired judgment, and lack of insight. Memory, orientation, and other higher mental functions were normal. Mr A was diagnosed with a case of mood disorder, with manic features according to *DSM-IV-TR*. He was treated with tablet haloperidol 15 mg/d and divalproex sodium 1,000 mg/d, to which he responded within 2 weeks. He was followed up for 3 months but did not develop additional manic symptoms.

The exact mechanism of psychiatric complications caused by antimalarials is not known, but the role of different neurotransmitter systems, eg, polyamines (especially spermidine), dopamine excess, acetylcholine imbalance, and prostaglandin E–antagonism, has been postulated.[4] This is the first case report of recurrent mania with chloroquine.

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