

Letters

Exacerbation of Psychogenic Movement Disorder by Interferon α Treatment of Hepatitis C

TO THE EDITOR: There are a number of neuropsychiatric side effects caused by interferon α (IFN α) treatment, such as fatigue syndrome, major depressive episodes, suicidal ideation, and mania.¹ IFN α treatment can also worsen preexisting psychiatric and psychosomatic disorders.²

We report the case of a 63-year-old patient who presented to our joint hepatological-psychiatric outpatient clinic for IFN α treatment of chronic hepatitis C virus (HCV) infection.

Case Report

The patient reported a 25-year history of chronic psychogenic gait disorder and personality disorder. The first signs of psychogenic movement disorder (PMD) had presented in the context of the diagnosis of the HCV infection in 1980, with fluctuating/intermittent symptoms. After a myocardial infarction in 1993, the patient developed a more severe chronic PMD, present at all times, also presenting with paroxysmal weakness of the entire lower body. Since 1994, there have been repeated hospitalizations on psychosomatic and psychiatric wards, without significant improvement of the PMD.

We started the patient on citalopram 20 mg/day for 4 months before the IFN α treatment to prevent the possible development of depressive symptoms.³ Three months after the start of the IFN α treatment, the patient developed worsening of the PMD, requiring use of a wheelchair at home, resulting

in his referral to our hospital for psychiatric admission. On various occasions, he had spent hours lying in the same position until somebody helped him to get up.

On his admission, we saw a patient in a wheelchair. When helped into the upright position, he displayed a severe movement disorder, with sudden weakness of one or both legs. The patient showed effortful swaying of the trunk to counterbalance the weakness of the legs present at all times when standing or walking. He showed states of weakness of the whole body, accompanied by total incapacity to move without the help of others. On physical exam, the patient displayed an athletic body constitution and no consistent neurological deficits. Upon psychiatric exploration, we found a minor depressive syndrome (score of 17 on the Hamilton Rating Scale for Depression), in spite of his antidepressant pretreatment. We confirmed a combined personality disorder showing histrionic, narcissistic, and obsessive-compulsive traits (by means of the Structured Clinical Interview for DSM-IV [SCID II] and the Minnesota Multiphasic Personality Inventory [MMPI]), which had been administered on previous hospitalizations. We switched antidepressant therapy to escitalopram and increased the dosage to 20 mg/day. We added psychotherapeutic treatment in single and group settings. The patient was weaned from the wheelchair and achieved considerable improvement of the PMD. We saw full remission of depressive symptoms, and continued the IFN α treatment.

Discussion

Mechanisms for direct effects of IFN α on the CNS, such as decrease of tryptophan availability, central serotonergic

deficit, increase of cortisol after activation of the hypothalamic-pituitary-adrenal axis, and induction of cytokines have been described elsewhere.⁴ These effects are known to play a role in the pathophysiology of depression. We have also discussed emotional stress or a breakdown of defense mechanisms as psychological factors for the exacerbation of the PMD. Learning about the diagnosis of chronic HCV infection is a major stressful life-event that may have contributed to the onset of the PMD in our patient in 1980.⁵ The treatment of the HCV may reactivate the burden related to knowing about the disease. We conclude that IFN α treatment may impart the risk of worsening PMD by inducing stress, by biological effects leading to depression, and by reduction of patients' abilities to cope with intra- and interpersonal conflicts by use of defense mechanisms. We therefore recommend intensified psychotherapeutic support and antidepressant pharmacotherapy in these instances.

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Exacerbation of Psychotic Symptoms Associated With Gatifloxacin

TO THE EDITOR: Gatifloxacin is a widely-prescribed 8-methoxy-fluoroquinolone antibiotic effective against a wide range of gram-positive, gram-negative, and atypical microorganisms. It is generally well tolerated, with low rates of CNS adverse effects. Described here are two patients who experienced exacerbation of psychotic symptoms associated with gatifloxacin treatment.

Case 1

A 60-year-old man with a history of schizoaffective disorder and type II diabetes was doing well on sertraline 50 mg daily, quetiapine 200 mg bid, and glyburide 5 mg daily. He had not been hospitalized in 5 years and had not had hallucinations for several months. He developed bronchitis, and gatifloxacin 400 mg q am was started. Late on the next day, he began hearing voices and experiencing command hallucinations, which resulted in his hospitalization. On admission, gatifloxacin was discontinued because it was noted that it may have a possible interaction with gly-

buride, and a cephalosporin was substituted. His hallucinations gradually resolved over the next 36 hours, and he was discharged on his original medications. He has not had a significant subsequent recurrence of these symptoms.

Case 2

A 62-year-old man with paranoid schizophrenia treated with Risperdal Consta[®] 25 mg IM q 2 weeks was compliant with treatment and stable enough to live independently. He was started on gatifloxacin 400 mg daily after he developed a urinary tract infection. On Day 2 of treatment, he began to feel much more paranoid than usual. The following day, he complained that he was being spied on and that the TV was being used to monitor him, and he began hearing voices. By that time, his urine cultures revealed that the organism causing his infection was not sensitive to gatifloxacin, and he was changed to amoxicillin. His psychotic symptoms lessened noticeably over the next 2 days, and he reverted to his baseline status without any changes in his psychotropic medications.

Discussion

In these two cases, exacerbation of psychotic symptoms appeared to occur concomitantly with initiation of treatment with gatifloxacin and resolve with discontinuation of the drug. The only previously reported cases of psychosis with gatifloxacin treatment have been in elderly patients, one an 89-year-old woman,¹ and the other, an 86-year-old man.² Psychosis has been reported with fluorquinolone use in younger patients; these drugs include ciprofloxacin and

ofloxacin.³ Disturbances of the CNS occur at an overall frequency of 1%–2% in patients taking fluoroquinolones (but may range from 0.2%–11% for individual agents), and symptoms include headache, drowsiness, dizziness, restlessness, insomnia, agitation, and vision changes.³ Although CNS adverse effects of gatifloxacin are generally mild, an 87-year-old woman developed seizures and myoclonus,⁴ and a 69-year-old man developed delirium while receiving the drug.⁵

It may be seen that cases involving gatifloxacin and psychosis or delirium have involved patients age 60 or older, which possibly suggests that this age-group is more vulnerable. The CNS effects of fluoroquinolones are thought to be due to the drugs' ability to inhibit GABA_A receptors and possibly bind to NMDA receptors.³ Clinicians should be aware of the potential of gatifloxacin and other fluoroquinolones to precipitate or exacerbate psychotic symptoms.

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