

Psychotic mania induced by the withdrawal of pegylated interferon and ribavirin treatment

Introduction

Infection with hepatitis C virus is a major public health problem and the World Health Organization (1999) reports about 170 million cases of chronic hepatitis C worldwide. At present the most effective pharmacological therapy for chronic hepatitis C is pegylated interferon- α combined with ribavirin (Fried et al, 2002).

Recipients of this treatment suffer from various adverse effects, including a number of reported neuropsychiatric adverse effects. These effects are rare and one study reported an incidence of the development of psychotic disorders of less than 0.5% (Hosoda et al, 2000). This article reports an unusual case of severe psychotic mania that developed following the completion of treatment and resolved remarkably without the need of regular antipsychotic medication within 7 days.

Discussion

Infection is one of several organic dysfunctions that can lead to mania in patients with no history of affective disorder. In their literature review Krauthammer and Klerman (1978) report on cases of mania that have occurred secondary to drugs, neoplasm, epilepsy, metabolic disturbances and infection. This case is unusual in that it reports an organic cause of mania caused

by drug treatment for a chronic infection. It illustrates that to make the diagnosis it is important to be aware of potential organic causes of manic behaviour and to be familiar with the specific symptoms of the illness. **BJHM**

Fried MW, Shiffman ML, Reddy KR et al (2002) Peginterferon alfa-2a plus ribavirin for chronic hepatitis C virus infection. *N Engl J Med* **347**: 975–82

Hosoda S, Takimura H, Shibayama M et al (2000) Psychiatric symptoms related to interferon therapy for chronic hepatitis C: clinical features and prognosis. *Psychiatry Clin Neurosci* **54**: 565–72
Krauthammer C, Klerman GL (1978) Secondary mania: manic syndromes associated with antecedent physical illness or drugs. *Arch Gen Psychiatry* **35**: 1333–9
World Health Organization (1999) Global surveillance and control of hepatitis C: report of a WHO consultation organized with the Viral Hepatitis Prevention Board, Antwerp, Belgium. *J Viral Hepat* **6**: 35–47

Case Report

Mr R was a 45-year-old man who had been diagnosed with hepatitis C, genotype 3a. He was commenced on a 16-week course of pegylated interferon- α 2a 180 μ g per week and ribavirin 400 mg twice daily. He was otherwise healthy and had recently completed the Boston marathon. During treatment the only complaints Mr R made were of sleep disturbance and weight loss as a result of reduced appetite which are recognized side effects of the treatment.

Six days after completion of his treatment Mr R was picked up in the street by the police following several complaints from members of public. He was seen trying to damage parked cars and shouting repeatedly that he was God. He was agitated and had to be handcuffed by the police who escorted him to hospital. A physical examination was unremarkable except for a raised pulse rate of 120 beats per minute. There was no significant abnormality in his blood test results.

He was placed on Section 2 of the Mental Health Act for assessment of a suspected mental illness. Mr R had neither a past psychiatric history nor any past family psychiatric history. On admission to the psychiatric ward he believed that he was being followed on CCTV and made sexually inappropriate comments to staff. As he continued to be highly agitated olanzapine 10 mg intramuscularly was administered. Over the next day Mr R remained elated in mood and irritable with paranoid thoughts. Mr R did not require further emergency intramuscular medications as he gradually became calmer and more cooperative.

Three days after admission his mental state and behaviour began to show significant improvement. He had wished not to take oral olanzapine that was prescribed and hence no psychotropic medications were used following the initial olanzapine dose on admission. Mr R said that he had no recollection of being brought in by the police or his psychotic behaviour. He and his family denied that alcohol or illicit drugs had been used. He did recall that his sleep had been very poor, a common feature in mania, in the days before his admission. A computed tomography scan of his head was normal.

Seven days after admission he was visited by his family and allowed leave off the ward as there were no remaining psychotic or manic symptoms. He was later discharged from the ward after uneventful leave at home and remained well 6 months on.

Dr Y Ganeshalingam is Specialist Registrar in Psychiatry, **Dr S Suleman** is Consultant Psychiatrist and **Dr M Francis** is ST1 Psychiatrist, Ladywell Unit, University Hospital Lewisham, London SE13 6LW

Correspondence to: Dr Y Ganeshalingam